NORTH REGION

EMS & Trauma Care Council

Saving Lives in Island, San Juan, Skagit, Snohomish and Whatcom Counties

FY 05-07 Biennial EMS and Trauma Care System Plan

In Cooperation with the Washington State Department of Health
Emergency Medical Services & Trauma Care System

ACKNOWLEDGEMENTS

Submitted By: Garth Eimers, Current Council Chair and Dave Hammers, Past Council Chair

Adopted By: North Region Executive Board, General Council and Council Subcommittees

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FY05-06 Executive Board Elected Officers	**FY04-05 Executive Board Elected Officers**
Council Chair, Garth Eimers	Council Chair, Dave Hammers
1st Vice-Chair, Lainey Volk	1st Vice-Chair, Lainey Volk
2nd Vic-Chair, Dan Harju	2nd Vic-Chair, Michael Ganz
Treasurer, Ann Moore	Treasurer, Ann Moore
Secretary, Jack Robinson	Secretary, Dan Harju
MPD: Currently Vacant	MPD: Dr. Paul Zaveruha

Prehospital Committee - Includes Four (4) Subcommittees

Committee Chair: Jack Robinson, Everett Fire Department

- **Communications Subcommittee**
  Committee Chair, Tom Howell, Snopac
- **Recruitment and Retention Subcommittee**
  Committee Chair: Michael Ganz, Arlington Fire Department
- **Patient Care Procedures Subcommittee**
  Committee Chair: Dan Harju, Arlington Fire Department
- **Need and Distribution of Services Subcommittee**
  Committee Chair: Shane Sanderson

Education Committee
Committee Chair: Earl Klinefelter, Skagit Medic One

Hospital QI Committee
Committee Chair: Dr. Barbara Bachman, St. Joseph Hospital

Hospital Facilities Committee
Committee Chair: Patrick Michaelis, St. Joseph Hospital

Whatcom County SAFE KIDS Committee
Committee Chair: Patrick Michaelis, St. Joseph Hospital

Region 1 Hospital Emergency Preparedness - One (1) subcommittee
Committee Chair: Arne Eriksen, Skagit Valley Hospital

- **Communications Subcommittee**
  Committee Chair: Dr. Kevin Thomas, Everett Clinic

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I. Executive Summary

The North Region EMS & Trauma Care Council (NREMSTCC) addresses the continuum of EMS and trauma care from access to 9-1-1, through prehospital and hospital components, and system evaluation and prevention. The North Region continues to grow at a rapid rate, ever challenging the EMS and Trauma Care System to provide timely and effective service. Increasing public demand for rapid, quality services are in contrast to increasing elusive funding resources to support public health and safety.

Authority – Regional Council Coordination

The NREMSTCC is authorized by RCW70.168 and WAC 246-976 to provide organizational leadership and coordination of the EMS and Trauma Care activities within the region.

- *Goal 1: The NREMSTCC has a comprehensive and fully engaged membership and efficient work processes that address regional system needs.*

Injury Prevention and Public Education

The Council recognizes that this segment in the *Continuum of Care* has the capacity to make a difference in reducing death and disability. Programs comprising the IPPE infrastructure include: SAFE KIDS, Elderly Falls Program, Bicycle Helmet Education and Distribution, Mini-Grants for local initiatives and DUI Prevention Programs throughout the region.

- *Goal 1: Strong Regional IPPE infrastructure results in community awareness of high-risk injury groups; reduced duplication of efforts and maximized results.*
- *Goal 2: Reduced premature death and disability due to injury among high-risk groups.*
- *Goal 3: Comprehensive injury prevention activities including existing and new programs.*

Prehospital

***Communication*:** The Pre-Hospital Communication Sub-committee and the Region 1 Hospital EPR Committee will continue to review communication issues and needs. The Council will continue to pursue closer relationships with dispatch agencies and annually promote both EMD and CBD training with the dispatch agencies in the North Region.

- *Goal 1: A comprehensive local, regional communication system meets the communications needs of the North Region for day-to-day operations and all mass casualty large scale-hazard incidents.*
- *Goal 2: North Region interoperable communication needs for hospitals are identified and coordinated.*

Medical Direction of Prehospital Providers: The Council would like to strengthen the role of MPDs in the Region to improve system operations and planning, communications between counties and intra-agency relationships, as well as strengthening provisions of oversight for BLS. MPDs continue to identify efficient and effective ways for sharing and augmenting training resources for paramedics.

- *Goal 1: MPDs are engaged in the Regional Council and System QI.*
- *Goal 2: Improved inter-county response supported by Medical Program Directors.*

Prehospital EMS and Trauma Services: The region has 54% volunteer personnel. The Region plans to address recruitment and retention issues through an *Annual Recruitment and Retention Workshop*. The region plans to address SEI issues by facilitating an *Annual SEI Workshop* where SEIs can come together to find new methods to teach and new ways to address new certification requirements.

- *Goal 1: North Region has recruitment and retention plan for volunteer provider agencies.*
- *Goal 2: North Region has a sufficient prehospital instructor pool and state evaluator pool.*
- *Goal 3: The entire North Region has comprehensive and prioritized prehospital training.*
- *Goal 4: North Region has a Regional OTEP Program.*

- *Goal 5: North Region coordinates training/education aids and equipment needs through the DOH Prehospital Needs Grant.*
- *Goal 6: The North Region is educated about Geriatric Emergencies.*

Verified Aid and Ambulance Services: There are 85 verified agencies in the North Region. The region has completed a Need and Distribution of Services document this year for all five counties, but still needs to provide data to show that *current reality* is adequately serving the communities of the Region. Prehospital agencies need to continue to identify their equipment, training, and communications needs. Minimum/Maximum recommendations for verified services will not be submitted at this time.

- *Goal 1: County specific Need and Distribution of Services documents remain current.*

Patient Care Procedures (PCPs), County Operating Procedures (COPs) and Multi-County / Inter-Regional Operations: The North Region will continue review of existing PCPs and COPs make recommendations to revise or expand as appropriate. The Region will also be developing a PCP for providing trauma and burn care to at least 50 severely injured adult and pediatric patients due to an MCI. There is a need to continue the development of mutual aid agreements for multi-county and/or county/inter-regional prehospital patient care. The North Region borders British Columbia and a written mutual aid agreement for the transport of patients between the borders needs development.

- *Goal 1: All Patient Care Procedures (PCPs) are reviewed annually and kept up-to-date with system adjustments and changes.*
- *Goal 2: Functional Multi-County / Inter-Regional Operations*

Designated Trauma Care Services

Definitive care is provided by 11 hospitals/clinics in the Region, committed to meeting the standards of designated trauma services. North Region provides a forum for networking and addressing current issues between the facilities via the Hospital Trauma Facility Committee and has plans to work with DOH to conduct an Assessment of Need for the Region.

- *Goal 1: Designation process understood by all North Region hospital representatives.*
- *Goal 2: Effective Transfer Criteria with HMC are in place.*
- *Goal 3: Inter-facility transfers in the North Region are evaluated.*

EMS & Trauma System Evaluation

Information Management & Data Collection: North Region supports prehospital transport agencies collecting data and submitting to receiving hospitals that, in turn, submit data to DOH through the established process. A regional QI program includes agency, county, and regional components, analyzing data and making recommendations for system improvement.

- *Goal 1: The North Region has reliable EMS data.*
- *Goal 2: North Region is in compliance with state requirements for Prehospital trauma data submission*

Quality Improvement Programs: The North Region EMS & Trauma Care Council is working collaboratively with the Level II and Level III hospital leadership toward an improved Regional Quality Improvement (QI) Program, by providing administrative and financial support to their planning. Data reports using specific filters and focused case review are presented at quality improvement meetings quarterly. Plans include providing Category 1 CME for medical providers quarterly.

- *Goal 1: Improved Regional Quality Improvement (QI) Program*
- *Goal 2: North Region hospitals provide the best patient care for transfers and diversions.*
- *Goal 3: North Region uses standardized Trauma Registry reports to improve Regional Performance Improvement.*

All Hazards Preparedness

Prehospital: Prehospital care services require personnel, equipment, supplies, and vehicles. Personnel must be properly trained and experienced in triage, treatment and transportation functions, as well as field decontamination considerations during an all hazards incident. Plans include identifying and addressing needs in these areas, as well as including and facilitating prehospital leadership in integrating with other disciplines to develop a comprehensive plan.

- *Goal 1: Integrated system of all hazards preparedness for pre-hospital response agencies in the North Region.*
- *Goal 2: An integrated response in the North Region to an incident involving at least 50 severely injured adult and pediatric patients.*

Hospital: Planning for Region 1 Hospital Emergency Preparedness includes the ongoing development of a Regional Bioterrorism Hospital Emergency Preparedness Plan. Continued planning needs to further define and identify hospital capacity resources. Sufficient personnel trained and experienced in decontamination, triage, treatment and personal protection must also be identified to provide sustained operations. Hospitals are also addressing interoperable communication needs on a regional level. Regional planning will continue to meet the hospital needs as identified by HRSA benchmarks.

- *Goal 1: Region 1 Integrated system of all hazards preparedness for hospitals.*
- *Goal 2: Updated Region 1 Bioterrorism Emergency Preparedness Plan*

Plan Changes Requiring Department Approval

Prehospital Min/Max: No changes at this time.

It is expected that there will be many reductions in MAX categories to be submitted to the Steering Committee before the end of 2005. The Region is currently working toward substantiating with data current levels are currently meeting community needs.

Designation of Trauma Care Services: No changes at this time.

The Hospital Facilities Committee will be conducting a needs assessment to further define Min/Max levels.

Regional Patient Care Procedures: No Changes at this time.

PCP#5 will be updated in the upcoming future.

II. Authority – Regional System Coordination

A. Regional Council Coordination

1. North Region System Status:

Authority: RCW 70.168.015(7): "Emergency medical services and trauma care system plan: A statewide plan that identifies state-wide emergency medical services and trauma care objectives and priorities and identifies equipment, facility, personnel, training and other needs required to create and maintain a state-wide emergency medical services and trauma care system. The plan includes a plan of implementation identifying state, regional and local activities that will create, operate, maintain and enhance the system. The plan is formulated by incorporating the regional emergency medical services and trauma care plans required under this chapter."

Regional Council Roles and Responsibilities: The four phases of **trauma care** (prevention, pre-hospital, hospital, post-acute - rehabilitation) are based upon a philosophy of a **continuum** of **care**. The North Region EMS & Trauma Care Council works with these components and phases.

The Council's responsibility is to identify and analyze system trends to evaluate the EMS/TC system and its component subsystems, using trauma registry data provided by the Department of Health. Using this data, we develop and submit biennial regional EMS/TC plans to the DOH, which identify the required regional EMS/TC system requirements. The plan identifies the need for and recommends the distribution of level of care (basic, intermediate or advanced life support) of verified aid and ambulance services for the North Region.

The Council also identifies EMS/TC services and resources currently available within the region, describes how the roles and responsibilities of the MPD are coordinated with those of the regional EMS/TC council and the regional plan, and identifies a schedule for implementation of the regional plan.

In developing or modifying the plan, the Regional Council must seek, and consider, the recommendations of the local EMS/TC councils, and the EMS/TC systems. Additionally, we must use regional and state analysis provided by the Department based on trauma registry data and other appropriate sources. The regional council must adopt regional patient care procedures as part of the regional plans.

The Regional Council consists of volunteer members, recommended by Local EMS Councils and appointed by the Secretary of DOH. The Council is a not for profit agency operating with a staff of three.

Regional Council *Mission* Statement

North Region EMS & Trauma Care Council Mission: The mission of the North Region EMS & Trauma Care Council is to promote a coordinated, region-wide EMSTC system. The System shall provide quality, comprehensive, and cost effective emergency medical and trauma care to individuals in Island, San Juan, Skagit, Snohomish and Whatcom counties.

North Region EMS will continue its work, in cooperation with the Washington State Department of Health, to develop an efficient EMS and trauma care system delivering the "right" patient to the "right" facility in the "right" amount of time, in a cost effective manner that assures appropriate and adequate patient care, prevents human suffering and reduces the personal and societal burden of the results from trauma.

Injury Prevention Mission Statement

Provide regional leadership and focus, including resources and technical assistance, to agencies and programs to ensure success and continuation of injury prevention programs throughout the region.

RCW and WAC - Involvement of Regional EMS/TC Councils in Regional Planning and Plan Development

The North Region EMS and Trauma Care Council is empowered by RCW 70.168.010–70.168.900 and WAC 246-976 to plan, develop, and administer the EMS and trauma care system in Island, San Juan, Skagit, Snohomish and Whatcom Counties. The Washington Department of Health (DOH), Office of Emergency Medical Services and Trauma System funds the Council, which works with the DOH, five County EMS Councils, five Medical Program Directors, six 9-1-1 centers, 87 licensed EMS agencies, and 10 designated healthcare facilities to fulfill its mandate.

2. Need Statement:

- Council Membership and Activity Review:
  - Consideration for new membership classifications: Dispatch, Emergency Management, Public Health, Tribal Government, Military
  - Need to review non-participating memberships: Law Enforcement
  - Need to have more alternate membership as backup for members.
  - Need to provide appropriate membership orientation.
  - Develop roles and responsibilities for executive board and committee chairs.
  - Develop a "training" overlap for new Executive Board members and Committee Chairs.
  - Provide Annual Committee Meeting Calendar
  - Annual Retreat / Planning & Recognition of Membership Contributions
- Update Regional Council By-Laws
- Upgrade Accounting System to Track Project Costs

3. Goals/Objectives/Strategies:

GOAL 1: The North Region EMS & Trauma Care Council has comprehensive and fully engaged membership.

Objective 1 (By June 2006): Review membership participation - insure all membership positions are filled and regularly participating.

- ***Strategy 1:*** North Region office to keep attendance records of membership and provide at annual meeting.
- ***Strategy 2:*** North Region to keep local EMS councils updated on attendance of their representatives.

Objective 2 (By June 2006): Update By-Laws based on current needs and trends.

- ***Strategy 1:*** North Region to form By-Laws Review Committee and schedule meetings to review Regional Council By-Laws.

- ***Strategy 2:*** North Region to review By-Laws from other regions in the state to look for best practices.

Objective 3 (July 2005, July 2006, and July 2007): Post a coordinated annual list of regional committee meetings and events on the Web site by July of each year.

- ***Strategy 1:*** North Region to ask each committee chair to set meetings a year out.

- ***Strategy 2:*** North Region to have Webmaster post calendar on the website, as well as email calendar to all Regional Council and committee members.

Objective 4 (April 2006, April 2007): Hold annual North Region EMSTC Council Regional Retreat.

- ***Strategy 1:*** Use North Region Retreat as an opportunity to facilitate regionally system planning.

- ***Strategy 2:*** Use North Region Retreat as an opportunity to recognize members for their contributions.

- ***Strategy 3:*** North Region to provide updated Regional Council Workbook for council and committee membership.

Objective 5 (June 2006, June 2007): Upgrade the accounting system to better track council finances.

Projected Costs
Estimated System Costs: N/A
Regional Council Costs: $7,000 for Regional Retreat, which includes costs for Regional Council Workbook and Awards, etc. Estimate of $1,500 for accounting system work.

III. Injury prevention & public information/education

A. IPPE

1. North Region System Status:

Table A. Regional Injury Data

Fatal Injuries 1998-2002	Island	San Juan	Skagit	Snohomish	Whatcom	Five County Total	WA State Total
MVT – Occupant	9.8	7.1	14.6	8.4	9.2	9.3	9.2
Falls	5.6	*	7.8	6.2	5.8	6.2	7.0
Poisoning	3.4	*	8.6	6.8	7.6	6.8	6.9
Suffocation/ Obstruction	2.8	*	1.8	1.0	1.7	1.4	1.4
Fire/Flame	*	*	*	0.7	*	0.7	1.0
Drowning	2.5	*	2.3	1.4	2.3	1.8	1.8

Non-Fatal Injuries Hospitalizations 1998-2002	Island	San Juan	Skagit	Snohomish	Whatcom	Five County Total	WA State Total
Falls	224.0	280.1	311.0	237.7	286.9	253.7	281.0
MVT – Occupant	36.4	46.9	57.2	39.7	47.4	42.7	46.4
Poisoning	11.8	11.4	15.4	23.6	35.5	23.7	25.4
Fire/Flame	10.1	*	12.8	8.6	7.8	9.0	9.9
Struck by or against	9.0	14.2	13.8	13.9	15.3	13.8	15.3

Source: DOH Website 1998-2002

Note: These are injury rates per 100,000 population, * denotes rates not calculated for values <5

North Region Injury Data of High-Risk Focus Areas

Identified high-risk groups with fatalities in the North Region include patients who have been involved in motor vehicle trauma, poisonings, falls and drowning. For non-fatal injuries high-risk groups include those who have experienced falls, motor vehicle trauma and poisoning.

Once the Injury Prevention Committee has been organized, a thorough review of each high-risk group will be conducted with the goal to develop or institute focused prevention programs. The Region plans to: 1) identify what injury prevention programs are already in place in the region; 2) identify what agency oversees these programs; 3) develop strategies that compliment and add value to existing programs.

Current Injury Prevention Resources and Efforts in North Region

Several of the Injury Prevention Resources and Efforts supported financially and administratively by the Regional Council and Office include:

SAFE KIDS

On average, children ages 0-14 comprise 20% of each county's population in the North Region. This age group is the focus of the injury prevention efforts in the three SAFE KIDS Chapters (Skagit, Snohomish and Whatcom Counties). Below is demographic information for children throughout the Region.

Table A.1 Age Demographics for Children in North Region

	Under 5 yrs.	5 – 9 yrs.	10 – 14 yrs.	Total Population	% of Total Pop. 0-14 yrs.
Island County	4,781	5,179	5,259	71,558	21.2%
San Juan County	525	752	942	14,077	15.6%
Skagit County	6,718	7,560	7,894	102,979	21.5%
Snohomish County	43,461	47,564	47,768	606,024	22.8%
Whatcom County	10,210	11,312	11,707	166,814	19.9%
Washington State	394,306	425,909	434,836	5,894,121	21.3%

Source: U.S. Census 2000

Each SAFE KIDS Chapter strives to address the mechanisms of fatal and non-fatal injuries for children 0-14 years of age. In the following table, injury mechanisms are ranked by county. N/A represents a field where no data was reported.

Table A.2 Injury Data Ranked by County for Children 0-14 Years

COUNTY	#2 Fatal Injury	#1 Fatal Injury	#3 Fatal Injury	#1 Non-Fatal Injury	#2 Non-Fatal Injury	#3 Non-Fatal Injury
Island	MVT – Occupant	Suffocation/ Obstruction	N/A	Falls	Pedal – Cyclist	Fire/Flame
San Juan	N/A	N/A	N/A	Falls	Drowning	N/A
Skagit	Suffocation/ Obstruction	MVT – Occupant	N/A	Falls	Fire & MVT – Occupant	Struck by or against
Snohomish	Drowning	MVT – Occupant	N/A	Falls	Pedal – Cyclist	Fire/Flame
Whatcom	Drowning	MVT – Occupant	N/A	Falls	Struck by or against	MVT – Occupant
Washington State	Drowning	MVT – Occupant	Suffocation/ Obstruction	Falls	MVT – Occupant	Fire/Flame

Source: DOH Website

Skagit County SAFE KIDS: The Skagit County SAFE KIDS Chapter has a new Lead Agency in Skagit Valley Hospital. The Hospital has taken an active role in re-introducing the Chapter to the community. In 2005, Skagit County SAFE KIDS will hold its Kick-Off event that includes a Community Needs Assessment presentation from the Public Health Officer. This data will identify focus areas for the Chapter in the upcoming years. Skagit County SAFE KIDS also plans to invite Island County Injury Prevention leaders to take part in the Chapter and extend events into the Island County community.

***Snohomish County SAFE KIDS*:** Snohomish County SAFE KIDS meets annually to develop focus areas for the upcoming year based on community need derived from Snohomish County data. The Coalition has chosen four areas of focus for 2005: Child Passenger Safety for the 60-80 pound child; Falls in all age groups; Drowning in the preschool age group; and Pedal Cyclist Safety for 5-9 year olds.

Whatcom County SAFE KIDS: The Whatcom County SAFE KIDS Chapter has chosen three main focus areas for 2005 based on current programs within the community: Bicycle/Helmet Safety, Water Safety, and Child Passenger Safety**.** The Chapter is currently working on a Community Needs Assessment and the development of its own goals, objectives and strategies based on the data provided by the assessment.

DUI PREVENTION

In the North Region, approximately 45% of all traffic fatalities are alcohol related. The Regional Office intends to partner with existing DUI Task Forces and the Washington Traffic Safety Commission in our efforts.

Table A.3 Regional DUI Data

	Total Traffic Fatalities	Total Alcohol Related Fatalities	% of Alcohol Related Fatalities
Island County	6	2	33%
San Juan County	4	2	50%
Skagit County	21	8	38%
Snohomish County	47	22	47%
Whatcom County	14	8	57%
Washington State	600	259	43%

Source: Fatality Analysis Reporting System

***Skagit County DUI Task Force*:** The Skagit County DUI Task Force works collaboratively with the Washington State Patrol, Washington Traffic Safety Commission, and the local MADD Chapter, among other organizations. The emphasis of the Task Force is enforcement and counter measures.

Enforcement: Each year, Skagit County participates in Surround the Sound, a shared effort in the 10 counties surrounding Puget Sound to enforce safe driving and DUI laws. Another annual event is the Night of 1000 Stars, which is a statewide effort to reduce DUIs during the holiday season.

Counter Measures: The Skagit County DUI Task Force also conducts a Victim's Panel throughout the county. Any person arrested for a DUI, regardless of the outcome in court (unless the case is dismissed), must attend a Victim's Panel. The Victim's Panel consists of real-life stories from victims of DUIs and also those who have been involved in a DUI-related event. The Panel has a significant impact on the attendees.

The Task Force also organizes Defensive Driving courses for senior citizens. These classes focus on the dangers of driving while impaired by a prescription or over-the-counter medication. A class for county employees who drive county vehicles is also offered.

***Snohomish County DUI Task Force*:** The Snohomish County DUI Task Force Coordinator, Tracy McMillan, also serves as the Chair for the Washington State DUI Task Force. Snohomish County's Task Force has several enforcement and counter measure programs.

Enforcement: Snohomish County participates in many multi-jurisdictional patrols each month and also in statewide programs, such as Drive Hammered, Get Nailed and Click It or Ticket. The Task Force also collaborates with local law enforcement agencies in providing the Field Sobriety Test Course to law enforcement officials.

FAME: Furnishing Alcohol to Minors Enforcement is a program in which an underage participant poses as a patron in local stores and asks adult patrons to purchase liquor for him. If the adult patron agrees, the Task Force issues a citation to the adult for contributing to a minor.

PACE: Pro-Active Criminal Enforcement teams the Task Force with law enforcement and the State Liquor Board. PACE is divided into three sections of Snohomish County: North, South and East. Each month, the team places emphasis on different focus areas for DUIs, such as schools, pedestrians, and even bar compliance.

Counter Measures: Snohomish County DUI Task Force holds a Victim's Panel for court ordered offenders. They also have a program that allows offenders who are incarcerated for 24-48 hours to complete the requirement of attending a Victim's Panel while they are serving their jail time. The Task Force also holds an Awards Ceremony in March recognizing outstanding individuals in Traffic Safety. Snohomish's Task Force also participates in mock crashes and presentations at Snohomish County schools, as well as the Evergreen State Fair each year.

DUI Victim's Memorial Wall: The Snohomish County Task Force has developed the nation's only DUI Victim's Memorial Wall in McCollum Park in Everett. The Wall is dedicated to victims of DUIs and has 100 names so far. Each May, the Task Force hosts an unveiling of new tiles.

Whatcom County DUI Task Force: Whatcom County Sheriff's Department is a leader in DUI Prevention in the county. The Department developed a program titled "Room to Live" in which a traffic deputy presents a PowerPoint Presentation to the Driver's Education classes. The presentation includes information on all traffic safety and has a strong emphasis on DUI prevention.

Whatcom County Sheriff's Department is also beginning to implement a program to track minor (18 & under) drivers and their violations by issuing an emblem to be placed on the minor's car by the parent. In the event of a violation, the Sheriff's Department will contact the minor's parent or guardian regarding the violation and its terms.

BICYCLE HELMETS

Each county distributes bicycle helmets during various events, including safety fairs, and through Emergency Departments and Pediatric Wards in the Region's hospitals. The North Region Office provides bicycle helmets to agencies in all five counties through a proposal process.

Hard Shell Heroes Program: Many districts have the Hard Shell Heroes Program through local EMS, fire, and law enforcement agencies. Personnel from these agencies who observe children wearing a bicycle helmet provide the child with a coupon or certificate redeemable at a local store or restaurant. Snohomish County provides children with packets of information about bike helmets, a list of helmet distribution sites, and a coupon to any Snohomish County Dairy Queen.

CAR SEATS

North Region EMS & Trauma Care Council purchases car seats in bulk each year. The seats are distributed to agencies throughout the Region that express need and intent to distribute.

Island County Car Seat Safety Program: The Washington State Patrol in Island County receives car seats from the North Region Office each year and distributes the seats through various car seat inspection events. They also offer the seats to low-income families who approach the State Patrol Office.

San Juan County Car Seat Safety Program: San Juan County has recently re-instituted their Car Seat Safety Program. Agencies from each of the islands participate in hosting car seat check-up, inspection, and installation events. They also distribute car seats to low-income families.

Skagit County Car Seat Safety Program: Skagit County, in particular, maintains an outstanding car seat installation program through a partnership with a local car dealership, Blade Chevrolet. Throughout the year, Blade Chevrolet, Skagit County Medic One, and Skagit County SAFE KIDS host car seat inspections and installations -catering to the Hispanic population by having translators on site.

Snohomish County Car Seat Safety Program: Snohomish County Health District distributes more than 300 car seats annually. The seats go to public health nursing clients and outside referrals. They also have a car seat loan program for individuals with visiting children (i.e. grandparents). The Health District is participating with Snohomish County SAFE KIDS in a grant from the Washington Traffic Safety Commission to provide six Spanish and six Russian-speaking car seat check-ups and installations.

Whatcom County Car Seat Safety Program: Each year, the Whatcom County Health Department Maternal/Child Program provides car seats and installation to low-income families in the community. The car seats are provided through the North Region Injury Prevention Mini-Grant. The Whatcom County Health Department hosts this distribution in collaboration with the Whatcom County Traffic Safety Team, Whatcom County and National SAFE KIDS, BUCKL-UP, and the National Highway Traffic Safety Administration.

SAFETY FAIRS

Each county hosts Safety Fairs during the spring and summer months. NREMS provides educational literature on bicycle/helmet safety, pedestrian safety, DUI prevention, car seat safety, and more. The Regional Office also provides signage, brochures and printing for the Safety Fairs throughout the Region.

ISLAND COUNTY DATA & PROGRAMS

Table A.4. Island County Injury Data

Fatal Injury 1998-2002	Island County Total	Region Total	WA State Total	Non Fatal Injuries Hospitalization 1998-2000	Island County Total	Region Total	WA State Total
MVT – Occupant	9.8	9.3	9.2	Falls	224.0	253.7	281.0
Falls	5.6	6.2	7.0	MVT -Occupant	36.4	42.7	46.4
Poisoning	3.4	6.8	6.9	Poisoning	11.8	23.7	25.4
Suffocation & Obstructing	2.8	1.4	1.4	Fire/Flame	10.1	9.0	9.9

Source: DOH Website 1998-2002

Note: These are injury rates per 100,000 population, * denotes rates not calculated for values *<5*

Injury Prevention Programs in Island County include:

- Base 911 Camp

SAN JUAN COUNTY DATA & PROGRAMS

Table A.5 San Juan County Injury Data

Fatal Injury 1998-2002	San Juan County Total	Region Total	WA State Total	Non Fatal Injuries Hospitalization 1998-2000	San Juan County Total	Region Total	WA State Total
MVT – Occupant	7.1	9.3	9.2	Falls	280.1	253.7	281.0
Falls	*	6.2	7.0	MVT -Occupant	46.9	42.7	46.4
Poisoning	*	6.8	6.9	Struck by or against	14.2	13.8	15.3
Fire/Flame	*	0.7	1.0	Poisoning	11.4	23.7	25.4

Source: DOH Website 1998-2002

Note: These are injury rates per 100,000 population, * denotes rates not calculated for values <5

Injury Prevention Programs in San Juan County include:

- All Sport Helmet Distribution
- Smoke Detector/Falls Prevention Program
- Babysitter Certification
- Pedestrian Safety Program

SKAGIT COUNTY DATA & PROGRAMS

Table A.6. Skagit County Injury Data

Fatal Injury 1998-2002	Skagit County Total	Region Total	WA State Total	Non Fatal Injuries Hospitalization 1998-2000	Skagit County Total	Region Total	WA State Total
MVT – Occupant	14.6	9.3	9.2	Falls	311.0	253.7	281.0
Poisoning	8.6	6.8	6.9	MVT -Occupant	57.2	42.7	46.4
Falls	7.8	6.2	7.0	Poisoning	15.4	23.7	25.4
Drowning	2.3	1.8	1.8	Struck by or against	13.8	13.8	15.3

Source: DOH Website 1998-2002

Note: These are injury rates per 100,000 population, * denotes rates not calculated for values <5

Injury Prevention Programs in Skagit County include:

- Mock Crashes
- Project Child Safe Gun-Lock Program
- Skagit Valley Hospital Injury Prevention Program
- Skagit County SAFE KIDS

SNOHOMISH COUNTY DATA & PROGRAMS

Table A.7. Snohomish County Injury Data

Fatal Injury 1998-2002	Snohomish County Total	Region Total	WA State Total	Non Fatal Injuries Hospitalization 1998-2000	Snohomish County Total	Region Total	WA State Total
MVT – Occupant	8.4	9.3	9.2	Falls	237.7	253.7	281.0
Poisoning	6.8	6.8	6.9	MVT -Occupant	39.7	42.7	46.4
Falls	6.2	6.2	7.0	Poisoning	23.6	23.7	25.4
Drowning	1.4	1.8	1.8	Struck by or against	13.9	13.8	15.3

Source: DOH Website 1998-2002

Note: These are injury rates per 100,000 population, * denotes rates not calculated for values <5

Injury Prevention Programs in Snohomish County include:

- Brief Intervention
- Senior Saver Smoke Detector Program
- Heads Up for Scooter Safety
- Snohomish County SAFE KIDS

WHATCOM COUNTY DATA & PROGRAMS

Table A.8. Whatcom County Injury Data

Fatal Injury 1998-2002	Whatcom County Total	Region Total	WA State Total	Non Fatal Injuries Hospitalization 1998-2000	Whatcom County Total	Region Total	WA State Total
MVT – Occupant	9.2	9.3	9.2	Falls	286.9	253.7	281.0
Poisoning	7.6	6.8	6.9	MVT -Occupant	47.4	42.7	46.4
Falls	5.8	6.2	7.0	Poisoning	35.5	23.7	25.4
Drowning	2.3	1.8	1.8	Struck by or against	15.3	13.8	15.3

Source: DOH Website 1998-2002

Note: These are injury rates per 100,000 population, * denotes rates not calculated for values <5

Injury Prevention Programs in Whatcom County include:

- Mt. Baker/St. Joseph Hospital Helmet Program
- Whatcom County SAFE KIDS

CURRENT REGIONAL COUNCIL INVOLVEMENT WITH IPPE ACTIVITIES: The Regional Council reviews bi-monthly reports from the NREMS Injury Prevention Coordinator and makes suggestions accordingly. The Council is also involved in approving or rejecting applications for the North Region Injury Prevention Mini-Grant. Regional Staff is directly involved in the SAFE KIDS meetings as well as planning for a number of the IPPE events in the Region. The Regional IPPE Coordinator serves as Secretary for the Whatcom County SAFE KIDS Chapter and may be appointed as Treasurer for the Skagit County SAFE KIDS Chapter. The Regional Office also manages the distribution of bicycle helmets from the WTSC grant each year.

OVERALL REGIONAL INJURY PREVENTION GOAL: Reduce premature death and disability due to unintentional, preventable injuries.

NORTH REGION INJURY PREVENTION MISSION STATEMENT: Provide regional leadership and focus, including resources and technical assistance, to agencies and programs to ensure success and continuation of injury prevention programs throughout the region.

2. Needs Statement:

- Regional Infrastructure: that will continue funding and administrative support to region-wide and local IPPE programs
- IPPE Committee Building
- Regional Falls Prevention Focus for the Elderly
- Regional DUI Focus: including a pilot of safe rides for kids that are impaired
- Regional Car Seat Focus: including training more people to provide car seat checks
- Continued Access to Bike Helmets: for distribution and fitting across the region
- A relationship with Native American Tribes in the region for involvement in regional IPPE efforts

3. IPPE GOALS:

GOAL 1: Strong Regional IPPE infrastructure results in community awareness of high-risk injury groups, reduced duplication of efforts and maximized results.

Objective 1 (July 2006): Review, analyze and prioritize injury prevention activities.

- ***Strategy 1:*** Identify community prevention leadership in each county. Pull contact information from the lists of regional mini-grant recipients, SAFE KIDS leadership, hospital trauma coordinators, hospital data collectors, medical service officers (MSO) at local fire stations, Native American Indian clinic leaders, etc. with the development of a Regional Injury Prevention Data Base.

- ***Strategy 2:*** *Identify duplicated prevention efforts in order to reduce duplication and maximize results.*

- ***Strategy 3:*** Encourage representatives from each local council to share information on injury prevention programs in their local council meetings as well as the bi-monthly Regional Council meetings.

Objective 2 (January 2006): Support IPPE programs based upon that information.

- ***Strategy 1:*** Facilitate an all day "Regional IPPE Symposium" with speakers from throughout the region gathered to focus on high-risk aspects of injury throughout the region, including falls prevention. We would invite other speakers from the State DOH and from the State SAFE KIDS Coalition. From this gathering of prevention specialists, we would form specific focus groups, thereby not placing a burden for participants to regularly participate in a broad based regional injury prevention program.

- ***Strategy 2*****:** With assistance from Washington State and National SAFE KIDS, arrange for several expert speakers to attend and present at the symposium.

- ***Strategy 3:*** Invite vendors, such as Fed Ex, Helmets R Us, Evenflo, etc. to attend the symposium and set up Vendor Booths.

- ***Strategy 4:*** Working with symposium participants, develop a charter and regional roles and responsibilities for the Regional IPPE Committee.

Objective 3 (June 2006): Develop a Regional Injury Prevention Committee to review, analyze and prioritize injury prevention activities.

- ***Strategy 1*:** Query other regional IPPE coordinators regarding their identified mission, structure, roles and responsibilities and activities in their region to use as a starting point for the development of a North Region IPPE Committee.

- ***Strategy 3:*** Develop a draft proposal for formation of this Committee and present to the Regional Council in the last half of 2006 for approval. Submit approved proposal at the Regional IPPE Symposium for input and development of a charter, roles and responsibilities for the Committee. Meeting calendar shall be developed at this time also.

- ***Strategy 4:*** Combine efforts and personnel from each county to form Focus Groups within the Committee to provide support, assistance, resources, etc. for their specific focus to agencies and programs throughout the region.

- ***Strategy 5:*** Develop meeting calendar. Schedule the first committee meeting before the end of FY05-06.

Projected Costs
Estimated System Costs: N/A
Regional Council Costs: $4,550

Barriers: The North Region has gone through several transitions of staff over the past several years. Relationships in the prevention community are beginning to redevelop with the new regional leadership. However, initially there may not be a considerable response of interest in committee membership because there hasn't been adequate time to develop and rebuild basic relationships and promote regional involvement.

Objective 4 (June 2007): Continue to encourage each of the SAFE KIDS Chapters in Skagit, Snohomish and Whatcom County to develop short and long-term planning and education. A published strategic plan and education program will be developed.

- ***Strategy 1*:** Assist the groups with data collection and analysis, including presenting data from the State DOH website and instructions on how to use the data.

- ***Strategy 2:*** Provide and encourage injury prevention education to the members of the Chapters. This will include having the Regional Office on the meeting agendas to present and analyze data.

- ***Strategy 3*:** Encourage information sharing and the reduction of duplicate efforts, through the development of presentations from each member's organization on existing programs. This will also be accomplished in the Regional IPPE Symposium.

Projected Costs: Costs include administrative staff time to plan presentations and research data. Also included would be communications costs that could include mileage to meet with certain agencies, as well as long-distance phone calls.

System Costs: N/A
Regional Costs: $1,650

Barriers: Administrative staff time to research data may be limited due to other ongoing projects in the office. NREMS will strive to research and present data in a timely manner.

GOAL 2: A reduction of premature death and disability due to injury among high-risk groups.

Objective 1: Continue the annual mini-grant program that provides seed money for new injury prevention programs being developed, focusing on community education, as well as support the continuation of programs that are successful in reducing incidence of injury among high risk groups.

- ***Strategy 1:*** Submit mini-grant applications to prevention providers in the North Region by April 15th 2006 and April 15th 2007, requesting prevention agency to submit their application by May 30th, 2006 and May 30th 2007.

- ***Strategy 2:*** Announce recipients of mini-grants by August 1st, 2006. Applicants will be reviewed and approved at the June Regional Council meeting. Mini-grant funding awards will range from $500 to $1,500.

- ***Strategy 3****:* Request mini-grant follow-up report with invoices submitted to North Region no later than June 15th, 2006 and 2007.

- ***Strategy 4:*** Evaluate success of program initiation and/or continuation directly related to funding from the Mini-Grant program and submit report to Regional Council.

Projected Costs: $15,000 has been budgeted for this mini-grant. Additional costs include administrative staff time and supplies to include envelopes and stamps. Also included would be communications costs that could include mileage to meet with certain agencies, as well as long-distance phone calls.

System Costs: N/A
Regional Costs: $16,900

Barriers: The North Region has budgeted $15,000 for mini-grants, limiting the number of grant awards available to agencies in need of support.

Objective 2 (Beginning in August 2005 and continuing throughout the FY05-07 Biennium): Maintain an information sharing and education platform, using the North Region website at www.northregionems.com for potential grant opportunities, website resources for high-risk injury groups, calendar of events, etc.

- ***Strategy 1:*** Continue to maintain and improve current data on the region website, including educational information regarding injury among high-risk groups. The Injury Prevention Coordinator will be trained to perform website maintenance, allowing for more time-effective updates and eliminating most of the need for an outside contractor.

- ***Strategy 2:*** Work with the SAFE KIDS Chapters to encourage a "Regional Calendar" of events, as well as other pertinent information, supporting the infrastructure of coalition building and coordination of activities.

- ***Strategy 3:*** Update website with potential grant opportunities to include Rural AED Grant Information, Injury Prevention Mini-Grants, EMS Needs Grants, WSTSC DUI Grant activity, etc. By regularly providing this information, the region expects to have more participation on a variety of levels.

Projected Costs: Includes time to maintain and develop website. The Region has budgeted $300 per month to maintain and build the site. The regional office hires a Webmaster to update the website, as needed. The current Webmaster is teaching the region staff, as well as interested Committee Chairs the HTML EZpad 3.0 software used on the website.

System Costs: N/A
Regional Costs: $7,550

Barriers: Lack of training and time, as well as limited funding. The North Region staff is currently not fully trained in HTML. The time it takes to assess information and design a format to present information can also be a barrier at times. The purpose of putting information on the website is to provide information to more people, but also to refer people there to "answer all their questions". The information needs to be fully developed and organized to do this. The North Region has budgeted a small amount of funding for a Webmaster.

GOAL 3: Fully supported ongoing and new injury prevention activities that are reported at least bi-monthly throughout the course of the biennium.

Objective 1 (June 2007): Increase the correct usage of child passenger safety seats in all five counties in the region by 5% by providing funding for car seat checks and installations.

- ***Strategy 1:*** Contact Washington TSC to establish baseline.
- ***Strategy 2*****:** Continue to provide funding and support to county coalitions that focus on education of and the appropriate use of child passenger safety seats.
- ***Strategy 3:*** Participate in county car passenger seat safety installations.
- ***Strategy 4:*** North Region staff to receive certification training for car passenger safety installations.

Objective 2 (June 2007) Increase the correct usage of bicycle helmets by 5% in all five counties of the region by providing funding to support helmet events and the distribution and fitting of helmets.

- ***Strategy 1:*** North Region to develop a baseline for measurement.
- ***Strategy 2:*** Continue to provide funding and support to county coalitions that focus on education of and the appropriate use of bicycle helmets.
- ***Strategy 3:*** Participate in community safety fairs, assisting in the appropriate use of bicycle helmets.
- ***Strategy 4:*** Partner with agencies in all five counties to perform evaluations of the efficacy of helmet distribution programs. The Regional Office, in conjunction with the Washington Traffic Safety Commission, will assist with surveys before and after the helmet distribution event to gain insight as to whether the distribution actually increased helmet usage. These findings will be reported to the American Trauma Society and the Washington Traffic Safety Commission and to the DOH annually.

Projected Costs for Objectives 1 and 2: Staff time and possibly travel expenses for mileage, as well as funding for Mini-Grants to purchase car seats and bicycle helmets.

System costs: N/A
Regional Costs: $3,400

Barriers: The primary barrier is staff time to devote to this goal. It is the intention of the regional office to provide support and a presence in each of the five counties. Because of time barriers, the regional office will aim to participate at least bi-annually in each county.

Objective 3 (December 2006): Develop a Regional Falls Prevention Program specifically for the elderly.

- ***Strategy 1:*** Query all eight hospitals in the region to assess current falls prevention programs, including resources available such as videos, photographs, PowerPoint presentations, etc. Gather information on existing programs in the State. This will help develop resources for further program development. Contact the local Area Agency on Aging for further resources and programs.

- ***Strategy 2:*** Work with the data provided by the Washington State Department of Health to develop a detailed report on the region's fall statistics, by county. Gather "run" data from the region's EMS agencies regarding fall statistics. Upload this information to the region's website.

- ***Strategy 3:*** Organize a regional information packet, presenting the assessment of information gathered and the programs and resources available in the North Region.

- ***Strategy 4:*** Identify networking activities to achieve efficiency with the resources available in the region, as well as specifically identifying how the North Region office can be supportive to the falls program.

- ***Strategy 5:*** Report on the region's statistics and approaches to improving falls prevention activities and upload this information to the region's website. Identify the key players for falls prevention on the website.

Projected Costs: Includes administrative staff time and supplies including envelopes and stamps, and copy expenses. Video duplication could also be an expense. Also included would be communications costs that could consist of mileage to meet with certain agencies, as well as long-distance phone calls. Another potential expense will be for meeting room space and refreshments.

System Costs: N/A
Regional costs: $5,950

Barriers: The primary barrier is staff time to devote to this goal. It is the intention of the regional office to provide support for this very important high-risk area and to provide educational resources to communities that want to further develop their falls prevention program. Funding of the program represents an additional barrier.

Objective 4 (September 2005): Enhance ongoing DUI programs by providing each participant with an NREMS phone card.

- ***Strategy 1:*** Obtain funds from the Department of Health Office of EMS & Trauma Services/Washington Traffic Safety Commission DUI Prevention/Traffic Safety Grant.

- ***Strategy 2:*** Purchase phone cards through Corporate Phone Cards.

- ***Strategy 3:*** Develop a Request for Proposal and distribute to DUI Task Force Coordinators and Injury Prevention Partners in the Region. Proposals for programs in which agencies will distribute the cards will be reviewed by Regional Staff. A template for a follow-up report will be provided.

- ***Strategy 4*****:** Distribute phone cards to agencies that requested them. Collect follow-up reports from each agency distributing phone cards and report on programs that were supported to the Regional Council, DOH OEMSTS, and WTSC.

Projected Costs: Includes administrative staff time and communications costs that could consist of mileage to meet with certain agencies, as well as long-distance phone calls. The Regional Office will utilize the OEMSTS/WTSC grant to provide the travel and/or administrative fees for the individual performing the training and those being trained.

System Costs: N/A
Regional Costs: $6,450

Barriers: The primary barrier is staff time to devote to this goal. Proper research and preparedness will be vital in implementing the program. Funding issues could also arise if the OEMSTS/WTSC grant is discontinued.

Objective 5 (January 2006 – September 2006): Work with the Snohomish County EMS Council to initiate a pilot program offering taxicab rides to patrons of establishments serving liquor in Snohomish County to reduce the number of DUIs in the county, and eventually, the Region. A reduction in DUI arrests will be realized for each participating establishment.

- ***Strategy 1:*** Regional Council will obtain funds from the Department of Health Office of EMS & Trauma Services/Washington Traffic Safety Commission DUI Prevention/Traffic Safety Grant.
- ***Strategy 2:*** Snohomish County EMS and Trauma Council will contact local taxicab companies and establishments and set times to meet with Injury Prevention Coordinator and/or Executive Director to discuss program.
- ***Strategy 3:*** Snohomish County EMS and Trauma Council will implement a program utilizing as many taxicab companies and establishments as funding allows. The Local Council Office will focus its efforts on establishments that are on the state Liquor Control Board's DUI List.
- ***Strategy 4*****:** If the pilot program is effective in reducing the establishment's DUI numbers, the Regional Office will continue to seek funds to expand the project throughout the Region.

Projected Costs: Includes administrative staff time and communications costs that could consist of mileage to meet with certain agencies, as well as long-distance phone calls. The Regional Office will utilize the OEMSTS/WTSC grant to provide the actual funds for reimbursement to the taxicab companies.

System Costs: N/A
Regional costs: $5,900

Barriers: The primary barrier is staff time to devote to this goal. Funding issues could also arise if the OEMSTS/WTSC grant is discontinued.

IV. Prehospital

A. Communication (Includes Prehospital and Hospital)

1. North Region System Status:

Table B. Dispatchers with EMD Training by County

County	Total Dispatchers	EMD Training Program/s Used	Dispatchers Completed EMD Training (From a course in column #3)
Island	18	Power Phone EMD	18
San Juan	8	King County CBD	8
Skagit	38	King County CBD	38
Snohomish	113	King County CBD *(Tailored to Snohomish County)*	67
Whatcom	35	Q & A	11
Region	**212**		**142**

Current Relationship between Existing Regional Communication Resources

Communication Prioritized: Two Regional Council communication subcommittees have been formed; one focused on prehospital communication issues and needs, with the other communications subcommittee, focused on hospital issues and needs.

Hospital Communications Subcommittee: The Hospital Communications Sub-Committee through the HRSA grant provided funding, is supplying communications equipment such as satellite phones, HAM radios, 800 MHz radios, as well as coordinating the installation of wiring for this equipment in all North Region hospitals. The subcommittee is recommending rebuilding the MedCom and HEAR systems, and continue building the 800 MHz System north of Snohomish County when financial capabilities are available.

Prehospital Communications Subcommittee: The Prehospital Communications Sub-Committee has committed to at least two meetings per year to review the region's goals, objectives and strategies as it relates to dispatch agencies. The region's Prehospital Chair and Executive Director will participate in these meetings.

The Prehospital Communications Subcommittee will attend the Regional Council meetings representing dispatch leadership and report on regional and state communication issues.

Inter-Regional Hospital Communications Committee: The Regional Council participates in inter-regional communication planning.

800MHz Tri-County Interoperability Committee: is addressing the needs of interoperable communications between King, Pierce and Snohomish Counties. Communication between Snohomish, Skagit, Whatcom, Island and San Juan Counties needs to be addressed.

State Planning: Interoperability Executive Committee (SIEC): This group consists of leaders from across the state including law enforcement and fire chiefs. This state committee has completed a statewide assessment of communication challenges. They assessed the diverse types of communication used by the various public service agencies. This committee will also be coordinating a statewide communications plan, to achieve a consistent system with interoperability between public service agencies.

Communication Redundancy: *One goal for communication planning includes a redundant communication system. All disciplines in the region are working collaboratively toward this mutual goal.*

Effective 911 / E-911 Access – Including Wireless Technology

***Cell Phone 9-1-1 Access to Dispatch Center**:* Currently, cell phone calls are routed directly to dispatch centers; with no guarantee which dispatch center will receive the call, including dispatch centers in Canada.

The design of the cell phone tower systems results in limited ability to accurately identify the appropriate dispatch center for the location of the cell phone caller. Verizon has taken steps to have cell phone calls routed to the correct PSAP. Snohomish County will be transitioning to a cell phone service with PSAP mapping in 2004 – 2005.

Cell Phone Access Creates Dispatch Work Overload: Cellular phone communication has significantly increased dispatch workload. For example, when there is a car accident on a highway, there often is a flood of callers reporting the accident from their cell phone, requiring the dispatcher to completely respond to each caller. This, alone, has created work overload for dispatch agencies and creates a stress on the overall efficiency of timely response. This is being addressed by GPS technology that will provide wireless caller with the same level of E 9-11 service. Long ring time should also decrease soon, based upon information on the new 5E digital router that Verizon is installing in Snohomish, Skagit and Island counties.

Cell Phone 9-1-1 Access in Rural and/or Wilderness Areas: There is limited or non-existent cell phone coverage in rural and wilderness areas. Currently, there are no simple solutions to this issue, except for each county to re-address their rural areas to obtain the most current information as landline callers.

Dispatch of EMS by Trained Emergency Medical Dispatchers

The use of trained emergency medical dispatcher to dispatch EMS agencies to medical calls is prevalent in the North Region. Most dispatchers use Criteria Based Dispatch (CBD) guidelines, while Whatcom County uses protocol based, Priority Dispatch EMS to determine the appropriate level of emergency response. Also using North Region's Patient Care Procedure #3, dispatch personnel are directed on appropriate use of trauma system activation and prioritization. The value of regular EMD training cannot be underestimated. The North Region needs to continue training regarding prioritized medical dispatch.

Dispatch Integration with EMS: Policies and procedures for dispatch centers are often established without the direct involvement of each county's emergency service providers. Dispatch and EMS representatives are not actively participating in a systematic regional process. However, some dispatch agencies are active in local EMS councils. The region would like to directly collaborate with dispatch centers to effectively address pre-hospital emergency needs.

Bystander Care with Trained Emergency Medical Dispatcher Assistance

Dispatch assistance for bystander care is a formalized training program incorporated into EMD protocols, reinforcing the need to have all dispatchers EMD trained. All five counties in the North Region provide this training.

Criteria Based Dispatch (CBD) / Priority Dispatch EMS

Most dispatchers use Criteria Based Dispatch (CBD) guidelines, while Whatcom County uses protocol based, Priority Dispatch EMS to determine the appropriate level of emergency response. Also using North Region's Patient Care Procedure #3, dispatch personnel are directed on appropriate use of trauma system activation and prioritization. The value of regular EMD training cannot be underestimated. The North Region needs to continue training regarding prioritized medical dispatch.

Ability to Track:
Average Time to Contact a Live Person at 911 Centers

Currently, dispatch centers have the ability to track when the call arrives to the call taker and how long it takes them to answer. Actual times from dialing to when the call is ringing at the 9-1-1 center would need to be retrieved directly from Verizon. With the current PBX software, the region is unable to track the time it takes from when a person dials 911 to the time when the call is answered. Verizon is currently in the process of upgrading the PBX software.

Ability to Track:
Time from Initial 911 Calls to the Dispatch of the Responding EMS Agency

Currently, CAD systems are predominately used in the North Region. The following can be tracked by dispatch agencies in the region:

- Call Receive to Entry: (Time the call is received to the time it is entered in CAD.)
- Call Entry to Dispatch: (Time the call is entered in CAD to the time the unit is dispatched.)
- Dispatch to Enroute: (Time the call is dispatched to time when the first until goes enroute.)
- Enroute to On-scene: (Time from the first unit going enroute to the time when the first unit arrives.)
- On-scene to Clear: (Time from the first unit arriving to the time the last unit clears the call.)

Most dispatch centers in the region can track calls per department/district on a daily/monthly/yearly basis. Some centers can track call volume by hour.

Overload of Dispatch Centers

Most over load occurs when there is a multi-car motor vehicle collision, large-scale incident or an unexpected storm or other natural disaster. The VESTA Telephone system can alert all supervisors, dispatchers and call receivers of incoming 9-1-1 calls waiting to be answered (the display shows amount of calls in queue and the time the longest call has been waiting).

It can take over one year of training and experience to become a qualified call taker. It can take an additional three years or more of training and experience before a call taker is qualified to become a radio dispatcher.

Estimated Cost:
State-of-the-Art Communication Technology Equipment for EMS Communications within the Region

Snohomish County recently completed installation of Phase 1 of a countywide $26 million 800 MHz radio system and a new alphanumeric paging system is currently being implemented. There are too many variables to estimate future costs and the price tag is high. For example, Whatcom County has estimated approximately $30 million for 800 MHz capabilities and San Juan County has estimated approximately $200,000 for communication towers.

Ability of EMS Agencies to Communicate with Dispatch, Between Units and Across the Region and With Receiving Hospitals for On-Line Medical Direction

SNOPAC, SNOCOM and Marysville now have the ability to patch communications between the tri-county area (King, Pierce, Snohomish, Port of Seattle, and Department of Justice IWN).

SNOPAC, SNOCOM and Marysville, with the advent of Phase II of the 800 MHz system (anticipated completion first quarter of 2006), will have the ability to connect EMS units with the hospital talk group.

Snohomish County units have the ability to contact dispatch and each other on many channels and utilize their 800 MHz radios on the King County radio system to communicate with Shoreline units.

Also, there is a hospital communications net programmed into the radios that also include some King County hospitals.

Other dispatch centers in the Region need to respond and provide more information to obtain a more region-wide response to this section.

Other System Status Information

Primary/Alternate Communication Systems: With the exception of a few communications dead spots in rural and/or wilderness areas, field and field-to-hospital communications within each county are reasonably effective. Problems with Prehospital communications are predominantly in remote rural areas where neither cell phone nor radio will reach the receiving hospitals. Ambulances must wait until they are in cell phone or radio range. This is an ongoing problem requiring a statewide solution.

Back-up systems also present a significant weakness in all areas of the Region. The greatest impact of these communication issues will be felt during any major disaster situation, as there is few common agreement throughout the region on which systems would be utilized in such events. Currently, the major communications system during a disaster is the HAM radio system.

System Operation during Single Patient, Multiple-Patient, Mass Casualty and Disaster Incidents (Ambulance to Ambulance, Ambulance to Dispatch, and Ambulance to Hospital Communication Systems): Communications systems in the region continue to function for day-to-day standard operations. However, there is concern over how multiple-patient, mass-casualty, or other disaster incidents will strain current systems. Often, it is necessary for EMS providers to communicate with other agencies such as law enforcement, fire departments, and public utility agencies, while in route to, or at the scene of, an emergency call. In most locations, each of these agencies utilizes divergent radio frequencies. Some EMS agencies carry radio frequencies used by police and state patrol, while in other areas, the communication link must go through the emergency dispatch center requiring current and accurate information for coordination of communication at EMS scenes.

Regional Hospital Communication

All North Region hospitals have received communication equipment from the HRSA grant funds, which has prioritized hospital equipment needs. Each hospital has received satellite phones and HAM radios; however, this equipment has not met the need of providing regional hospital-to-hospital communication capability. Currently, there is no regional hospital-to-hospital communication capability, with the exception of Snohomish County, which has been accomplished through the countywide 800 MHz System. A communication assessment will need to be completed to determine the most efficient and cost effective route to establish communication linkage between all North Region hospitals.

Regional Hospital Control

In Snohomish County, Providence Everett Medical is Hospital Control for the four hospitals in the County. In Region 1, Hospital Control has been divided between Providence Everett Medical Center in Snohomish County and St. Joseph Hospital in Bellingham. Hospital Control communication patterns need to be reviewed and analyzed and regional procedures need to be developed with the two hospitals.

Regional Communication Plan

SNOPAC is currently working on a pre-hospital communications plan. This plan is being modeled on the King County Central Region Trauma Council Pre-Hospital Committee's plan for the 800MHz radio system. Radios within the North Region have different radio infrastructures (800MHz vs. VHF). With the advent of the DOJ grant, a mobile switch (ACU1000) has been purchased and can be used to patch dissimilar radios together.

2. Need Statement:

- Continued linkage of EMS communications with the rest of the public safety and healthcare force by keeping abreast of all communication issues and resources available.

- Continue the support and facilitation of the two communication sub-committees (Prehospital and Hospital) and to include dispatch leadership in planning.

- Continue to develop better working relationships with dispatch leadership and personnel on a regional level.

- Conduct annual survey to identify issues and solutions for improved 911Access - Cell Phone Access.

- Conduct Annual survey to assess current EMD Training - Medical Program Director to oversee the EMD/CBD/QI program.

- Continue to support interoperability for communication equipment – work with HRSA and ODP Grants.

- Work toward the development of a Regional Hospital Communication Talk Group on 800 MHz.

- Continue work with Regional Hospital Control development and procedures.

3. Goals:

GOAL 1: A comprehensive local, regional communication system meets the communications needs of the North Region for day-to-day operations and all mass casualty large scale-hazard incidents**.**

Objective 1 (Bi-Annually at regularly scheduled meetings): North Region office to continue to facilitate regular communication subcommittee meetings with dispatch, prehospital and hospital planners to share information and better understand the unique communication challenges in the region.

- ***Strategy 1:*** Council membership and North Region office to work with sub-committee chairs to set communication committee meeting calendar of two meetings each year.

- ***Strategy 2:*** Council membership and North Region office to work with sub-committee chairs to develop a comprehensive communication meeting agenda.

- ***Strategy 3:*** Council membership and North Region office to send meeting notice (first time formal letter) and invite dispatch leadership to planning meetings. Include agenda of meeting.

- ***Strategy 4***: North Region office and Council membership to continue the development of key relationships and keep abreast of state, regional and local communication resources, as well as provide updates at bi-monthly regional council meetings, providing continued awareness and education.

Objective 2 (June 2006/June 2007): Conduct annual survey of 911/ E-911 Access Systems, including wireless technology assessment, providing more system awareness and education in the region.

- ***Strategy 1:*** *North Region office to conduct annual survey with dispatch leadership regarding 911 / E-911 system issues and improvements via email and/or personal phone surveys to include the most recent technology solutions.*

- ***Strategy 2:*** *North Region office to provide results of regional survey during the scheduled communication meeting and facilitate discussions to further assess and improve 911 Access Systems. Definitions will include geographic and systemic challenges.*

- ***Strategy 3:*** North Region office will provide summary of survey, define issues and highlight solutions provided by dispatch leadership to other prehospital and hospital membership to continue communication awareness and education in the region.

Objective 3 (June 2006/June 2007): Conduct annual survey with all dispatch centers in the region to identify levels of training.

- ***Strategy 1:*** North Region office to survey each dispatch center in the region to determine the number and level of training of dispatchers in EMD (Emergency Medical Dispatch) and CBD (Criteria Based Dispatch) training.

- ***Strategy 2:*** North Region office to include in survey a query regarding level of MPD oversight in EMD/CBD/QI program.

- ***Strategy 3:*** North Region office to provide results of regional survey during the scheduled communication meeting.

- ***Strategy 4:*** North Region office to include dispatch center personnel in regional communication planning and quarterly QI meetings to effectively address pre-hospital emergency needs.

- ***Strategy 5:*** North Region office to request copies of PSAP's CBD/EMD protocols to compare and distribute to dispatch personnel on committee.

GOAL 2: North Region interoperable communication needs for hospitals are identified and coordinated.

Objective 1 (November 2005, November 2006): North Region office to utilize HRSA and ODP fund opportunities for hospital communication needs.

- ***Strategy 1:*** North Region office to facilitate Hospital Communications Subcommittee to identify hospital communication equipment needs.

- ***Strategy 2:*** North Region office to utilize Pre-hospital and communications groups to identify needs in the region and share information on alternative communication methods. For example, with the advent of the DOJ grant, a mobile switch (ACU1000) has been purchased in the region and can be used to patch dissimilar radios together.

- ***Strategy 3:*** North Region office to work with statewide committees and participate in them to ensure regional needs are addressed. The 800 MHz tri-county interoperability committee is addressing the needs of interoperable communications between King, Pierce and Snohomish Counties. Communication between Snohomish, Skagit, Whatcom, Island and San Juan Counties needs to be addressed.

- ***Strategy 4***: North Region office to facilitate meetings with Region 1 Hospital Emergency Preparedness Committee to develop Regional Hospital Control development and procedures.

- ***Strategy 5***: North Region office to facilitate the coordination and development of a Regional Hospital Communication Talk Group on the Snohomish County 800 MHz System.

Barriers: Communication issues are technically complicated and financially expensive.

Projected Costs:

System Costs: Minimum of 30 million dollars.
Regional costs: Approximately $6,500.

B. Medical Direction of Prehospital Providers

1. North Region System Status:

Current Status of MPD Leadership within the Region

MPD leadership is critical to prehospital care in the region. In the past, the region's five (5) MPDs have regularly met to revise local patient care *protocols (medical)* and regional patient care *procedures (operational)* in order to distribute them region-wide. In the last several years, these meetings have not consistently occurred because of significant personnel changes within three of the region's five counties.

The North Region's five (5) MPDs had spent so much time together over a period of close to 25 (+) or (-) years, they were able to accomplish their roles seamlessly efficient. In the past two years, the region has replaced three of the five county MPD members in San Juan, Skagit and Snohomish counties. Currently, the two senior MPDs, Island County and Whatcom County are providing the MPD leadership in the region.

This group continues to improve the regional EMS and Trauma System by re-evaluating current goals and strategies.

In the North Region, the MPDs have developed county specific patient care protocols. General principles of American Heart Association cardiac care and American College of Surgeons trauma care are common in the protocols of all five counties. They have also developed inter-county agreements for education and provider reciprocity. They are participating in ongoing development of new regional patient care procedures (system guidelines) and will be providing leadership in the development of the state's request to develop a Patient Care Procedure for providing trauma and burn care to at least 50 severely injured adult and pediatric patients as a result of a mass casualty incident.

- Providing oversight on education and training
- Involved in Quality Improvement on the Local Level

Current Level of Participation of MPDs (County/Regional System Levels)

The Region's system of Medical Program Direction is operating successfully on a local county level. However, it is a goal of the North Region to continue to pursue avenues of evaluation and improvement. The region would like to strengthen the role of the MPD and improve system operation by meeting quarterly to discuss regional issues.

Although dedicated to their duties, MPDs have limited time to devote to regional meetings. Limited funding and heavy patient loads contribute to this situation. However, they make themselves available through other means of communication when the need arises. A goal for the North Region is to work with all MPDs to find a more efficient way to conduct regional business, such as setting dates a year out and/or conducting meetings via conference call (with a clearly developed agenda).

The MPDs on a local level are very involved in EMT and paramedic education and the QI process for both hospital and prehospital activities. The MPDs participate in the local EMS council activities on a regular basis. The MPDs work with a variety of agencies within the county they represent on both hospital and prehospital EMS issues.

Because of the ever-increasing demand on time, limited support staff and inadequate funding available, it's challenging for MPDs to provide the desired oversight for both ALS and BLS needs. ALS needs by necessity are given priority and BLS needs are handled as effectively as possible. In several counties in the region, ALS personnel provide mentoring and educational support for BLS. This component of addressing more adequate BLS oversight has assisted the MPDs in their role.

MPDs are actively working to improve communications and inter-agency relationships and operations by working locally with multi-disciplinary agencies. MPDs are committed to continue strengthening the development of these relationships.

MPDs spend a significant amount of their time supporting continuing education and skills maintenance for both ALS and BLS levels with the limited resources available to them.

Current Involvement of the MPDs in PCP and COP Development

North Region MPDs are locally involved in the development of PCPs and COPs. North Region MPDs desire to be more involved in regional Patient Care Procedure reviews. Normally, MPDs would be more regionally involved, however due to changes in MPD personnel, Regional PCPs have not been reviewed in the last year.

2. Need Statement:

Needs Identified by North Region MPDs:

- Improvement in Inter-county response to mass casualty and WMD (*Weapons of Mass Destruction*)
- Provision of oversight for BLS needs strengthening
- Improvement of communications within and between counties
- Intra-agency relationships and operations both intra and extra county need improvement e.g. DEM (*Department of Emergency Management*), FD (*Fire Department*), PD (*Police Department*), SD (*Sheriff's Department*), etc.
- Primary and CE for paramedic and BLS, skills maintenance, CE (ability to have all the necessary materials, intellectual skills, computers for on-line training. Needs should be addressed for sharing and augmenting of resources:
    - There is a need to clearly identify what is needed for initial training, as well as continuing education for ALS & BLS providers.
    - Skill maintenance is dealing more with the challenge of paramedics maintaining IV and intubation skills, as required.

- Many paramedics, especially in rural areas, are challenged with maintaining skills as required by DOH standards. The challenge is to get this on-the-job experience and if it doesn't occur on the job, how can the experience be gained during working hours.

- There is a need for training tools that enhance ALS and BLS skills for critical patients in life-threatening situations.

- There is a growing awareness that health care is behind other high risk operations in its attention to ensuring basic safety and that there is a need to grasp the scale of the problem.

- Share resources on a region-wide basis.

3. Goals:

Goal 1: MPDs are engaged in the Regional Council and System QI.

Objective1: **(FY 05-07 Biennium)** Increased MPD presence and participation in Regional Council meetings on a quarterly basis as evidenced through attendance sheets and minutes of Regional Council meetings.

- ***Strategy 1***: Consult with MPDs regarding challenges and conflicts with their schedules. Ensure that Regional Council meetings requiring MPD presence are not scheduled at times that conflict with other necessary meetings of the MPDs.

Objective 2: (FY 05-07 Biennium) Establish quarterly MPD meetings that involve a more formal setting that includes active participation of the Regional staff.

- ***Strategy1****:* Create a dialog with county MPDs to reassess the goals of the MPD Committee.

- ***Strategy 2:*** Set up a Business Planning meeting with all MPDs to discuss the new approach to have an efficient and active committee.

- ***Strategy 3:*** Set up bi-annual or quarterly meetings for the MPD Committee to meet, beginning in 2005.

Objective 3: (FY 05-07 Biennium) MPDs routinely attending system and QI meetings to lead Prehospital issues and needs to include at least communication, education and training, and provide regular reports to the Regional Council.

Objective 4 (June 2007): MPD Committee will develop a consistent guideline for region-wide BLS oversight.

- ***Strategy 1****:* MPD Committee to assess what other communities are doing to address this challenge and determine what can be applied to the North Region.

- ***Strategy 2:*** MPDs will develop a guideline for BLS oversight

- ***Strategy 3:*** Regional office staff to assist Medical Program Directors as needed.

Goal 2: Improved inter-county response supported by Medical Program Directors.

Objective 1: (FY 05-07 Biennium) Have inter-agency relationships for operations and planning in place.

- ***Strategy 1****:* MPD Committee to assess what other communities are doing to address this challenge.

- ***Strategy 2:*** MPD Committee to investigate funding sources such as the Homeland Security Grant dollars to implement drill.

Projected Cost: Costs would include time for both MPDs and Regional staff. Other costs would include expenses associated with facilitating a meeting to include refreshments and meeting room fees. Other costs would include the expenses of holding a region wide drill. The Region would not be able to fund these expenses and would look for other funding sources and grants.

System Costs: N/A
Regional Costs: $1,500 to facilitate planning meetings.

Barriers: Medical Program Director time will be the largest barrier. Another barrier is not having an MCI model that is consistent in the Region.

C. Prehospital EMS and Trauma Services

1. North Region System Status:

Table C. - Prehospital Providers by County and Level

County	FY04-05 Plan				FY05-06 Plan			
	FR	EMT	EMT-I	PM	FR	EMT	EMT-I	PM
Island	50	208	1	18	23	245	1	22
San Juan	13	80	0	9	5	103	0	7
Skagit	97	206	7	39	49	152	11	38
Snohomish	124	907	24	111	65	1,091	44	191
Whatcom	188	392	3	47	96	535	7	50
Regional Totals	**472**	**1,793**	**35**	**224**	**238**	**2,126**	**63**	**308**

County	FY04-05 Plan							
	Career FR	Volunteer FR	Career EMT	Volunteer EMT	Career EMT-I	Volunteer EMT-I	Career PM	Volunteer PM
Island	16	34	39	169	0	1	17	1
San Juan	0	13	1	79	0	0	9	0
Skagit	26	71	36	170	4	3	39	0
Snohomish	16	108	443	464	19	5	111	0
Whatcom	23	165	123	269	1	2	46	1
Regional Totals	**81**	**391**	**642**	**1,151**	**24**	**11**	**222**	**2**

County	FY05-06 Plan							
	Career FR	Volunteer FR	Career EMT	Volunteer EMT	Career EMT-I	Volunteer EMT-I	Career PM	Volunteer PM
Island	5	18	77	168	1	0	22	0
San Juan	0	5	3	100	0	0	7	0
Skagit	19	30	54	198	11	0	38	0
Snohomish	15	50	602	489	26	18	191	0
Whatcom	2	94	184	351	1	6	49	1
Regional Totals	**41**	**197**	**920**	**1306**	**39**	**24**	**307**	**1**

DOH: November 30, 2004

County	Personnel Comparison							
	Career FR	Volunteer FR	Career EMT	Volunteer EMT	Career EMT-I	Volunteer EMT-I	Career PM	Volunteer PM
Island *(FY04-05)*	16	34	39	169	0	1	17	1
Island *(FY05/06)*	5	18	77	168	1	0	22	0
Comparison	**-11**	**-16**	**+38**	**-1**	**+1**	**-1**	**+5**	**-1**
San Juan *(FY04-05)*	0	13	1	79	0	0	9	0
San Juan *(FY05-06)*	0	5	3	100	0	0	7	0
Comparison	**-**	**-8**	**+2**	**+21**	**0**	**0**	**-2**	**-**
Skagit *(FY04-05)*	26	71	36	170	4	3	39	0
Skagit *(FY05-06)*	19	30	54	198	11	0	38	0
Comparison	**-7**	**-41**	**+18**	**+28**	**+7**	**-3**	**-1**	**-**
Snohomish *(FY04-05)*	16	108	443	464	19	5	111	0
Snohomish *(FY05-06)*	15	50	602	489	26	18	191	0
Comparison	**-1**	**-58**	**+159**	**+25**	**+7**	**+13**	**+80**	**-**
Whatcom *(FY04-05)*	23	165	123	269	1	2	46	1
Whatcom *(FY05-06)*	2	94	184	351	1	6	49	1
Comparison	**-21**	**-71**	**+59**	**+81**	**-**	**+4**	**+3**	**-**
REGION (+) (-)	**-40**	**-194**	**+276**	**+154**	**+15**	**+13**	**+85**	**-1**

FY04-05 Total Career Personnel: 969 FY05-06 Total Career Personnel: 1,307	FY04/05 Total Volunteer Personnel: 1,555 FY05-06 Total Volunteer Personnel: 1,528
26% Increase in Career Personnel	**2% Reduction in Volunteer Personnel**

Summary: Trends show that personnel numbers continue to increase and that personnel are being trained at a higher level. This may be in response to the expectations of the general public for a higher level of professionalism.

System Roles of Additional Public Safety Personnel

Mt. Baker Ski Patrol (Whatcom County) provides care for EMS and trauma patients at and around the ski area during winter operations. Patrollers have a mixture of skills to include EMT, Paramedic, nurse, physician, and ski patrol first aid trained providers.

The National Park Service provides initial care for visitors to the two national parks in the North Region, San Juan National Historical Park, on San Juan Island, and the North Cascades National Park, a wilderness recreation area, 600,000 acres of which are in Whatcom and Skagit County. Forty percent of the staff is comprised of EMT level personnel.

Search and Rescue/Mountain Rescue provide rescue and medical service throughout the region. Some members are EMT or first aid trained. These agencies coordinate with local Sheriff Departments and the Department of Emergency Management by county.

Whidbey Island Naval Air Station in Island County is utilized throughout the Region in rescues where hoisting of patients by helicopter is required. Activation of naval SAR units is through the Sheriff's department in the respective county.

Other Groups that Augment the EMS and Trauma System

North Region has many affiliated providers (i.e. county jail, etc.) that have certified EMS personnel; however, these organizations are currently not licensed through the DOH and are not required to follow the same guidelines as licensed and verified prehospital providers.

Prehospital Training Resources

Education and training for prehospital providers is a high priority in the North Region. The Regional Council has established an annual commitment to provide education and training funds through a Community Based Training (CBT) Grant. Local County EMS Councils receive Regional Council funding for initial training, Ongoing Training and Evaluation (OTEP) events, and continuing education. Special care is taken to emphasize the training needs of rural and volunteer providers. The Regional Council wants to ensure that the greatest areas of need are the focus of regional educational funds and contracts with Local EMS Councils to manage the county EMS education program.

Providing these funds to local EMS councils assures an adequate prehospital work force through initial training support and continuing education for re-certification. Additionally, the funds ensure local prehospital services can meet verification requirements.

At the local level, pediatric education continues to be an area of focus. The local programs continue to offer PALS to paramedics and to develop pediatric care modules for use in OTEP programs for Prehospital providers.

Bellingham Paramedic Program: The Bellingham Technical College has provided exclusive paramedic training for many years for Whatcom County Medic One. Recently, this program has been opened to other North Region providers, who may otherwise have to travel to Seattle, where the nearest program is located at Harborview Medical Center. The program at Bellingham Technical College will allow for a more flexible training model as the need for paramedic level personnel increases.

As the program expands to one which is regional in scope, an agreement between EMS agencies will be developed, wherein agencies sponsoring students will be asked to participate on the advisory committee, and will have priority of placing students in the class. Committee members will include those who provide direct support to the program in the form of field internship or clinical sites. The student must be an active member of the sponsoring EMS provider agency. There are no plans as yet for the program to train individuals who are currently not affiliated with an EMS Agency and who are seeking employment as paramedics upon successful completion of the course.

Annual Community Based Training (CBT) Grant: The North Region budgets approximately $60,000 through an annual Community Based Training (CBT) Grant. In the past several years, local EMS councils were unable to appropriately plan their training and have asked the North Region office to schedule the grant request process by May of each year.

Prehospital Training Resources:

TRAINING INSTITUTE / Organization	EMT Initial	EMT-P Recertification	OTEP & CME	First Responder	ILS	Paramedic	Paramedic CME	WMD
Island County								
Island County EMS Council	✔		✔	✔			✔ (Fall 2005)	
North Region EMS & TCC			✔ (Funding only)				✔	
Region 1 Public Health (HRSA & CDC)								✔
Emergency Management								✔
San Juan County								
San Juan County EMS Council	✔		✔	✔ (Shaw)				
North Region EMS & TCC	✔ (Funding only)							
Region 1 Public Health (HRSA & CDC)								✔
Emergency Management								✔
Skagit County								
Skagit County EMS Commission	✔	✔	✔	✔			✔	
North Region EMS & TCC			✔				✔	
Skagit Valley College	Fall 2005			✔				
Region 1 Public Health (HRSA & CDC)								✔
Emergency Management								✔
Snohomish County								
Snohomish County EMS Council		✔	✔	✔			✔	✔
North Region EMS & TCC	✔ (Recertification only)		✔ (Funding only)				✔	
Edmonds Community College (fire dept officer development)								✔ (Cyber Security)
Everett Community College	✔ (no recertification)			Some first aid				
Region 1 Public Health (HRSA & CDC)								✔
Emergency Management								✔
Fire District #26 (Gold Bar)	✔		✔	✔	✔			
Whatcom County								
Whatcom County EMS Council								
North Region EMS & TCC			✔				✔	
Bellingham Technical College						✔		
Region 1 Public Health (HRSA & CDC)								✔
Emergency Management								✔

***Recruitment and Retention*:** Emergency medical services have depended on volunteer support for many years. The importance of volunteers to the delivery of emergency medical services cannot be overstated and ultimately saves rural and suburban communities thousands of dollars.

North Region's rural communities rely almost totally on the volunteer system to provider EMS and fire services in a timely manner. Suburban areas also rely on volunteers, but combination career-volunteer systems are used more frequently, as a way to assist volunteers and to maintain the current EMS system. Continued funding for training and equipment needed for volunteers is very important to the survival of the *volunteer EMS system.*

As of November 30, 2004, North Region had a total of 54% volunteer personnel and 46% career personnel. EMS personnel shortfalls exist and our rural areas are still very heavily dependent on volunteer personnel. Training and meeting the needs of volunteer members are an ongoing challenge that requires effective and dynamic leadership and a good plan, meeting the basic needs of volunteers.

The very best way to meet the continuing challenges of volunteer recruitment and retention is to provide regular education and training to volunteer leadership, emphasizing the need for a systematic approach in management and planning.

Initial Provider Training and Continuing Education (OTEP)

Ongoing Training and Evaluation Program (OTEP) is comprised of modules that cover the cognitive and psychomotor aspects of standard EMS training. The current OTEP is based on the national standards for First Responder and Emergency Medical Technician curriculum along with the Washington State Specific Objectives. Each module has a written knowledge assessment evaluation and skills lab that pertain to the subject matter. With MPD approval and active participation in an approved BLS / ILS / ALS OTEP, providers are able to satisfy the required continuing education requirements in order to renew their WA State EMS Certifications.

Regional OTEP Development

The North Region's local EMS councils have traditionally each developed their own OTEP/CME training programs for their prehospital personnel. This cost runs approximately $3,000 for each local council. Recently, the North Region Education Committee members decided to partner and develop a "Regional OTEP" program, ultimately saving education and training funds for each local EMS council (approximate savings of $12,000). This planning project has started development in April 2005 and plans to implement a three-year program will begin in January 2007. Committee members have asked for longer meetings to appropriately plan, as well as submitting their individual local protocols and training requirements to appropriately plan curriculum development.

Instructor Pool

The North Region instructor pool consists of instructors that have been around for many years. There is a need to begin augmenting the instructor pool with younger instructors. The North Region would like to partner with the Northwest Region with a DOT Instructor Course (formally recognized Fire Instructor 1 Course) and offer this course to North Region personnel. This class is provided by a qualified instructor and will be teaching the 40-hour class in the third or fourth quarter of 2005. The overall class cost is $4,500, with individual feels at $125 per student.

SEI Instruction:

Instructor Status Report for December 31st of each corresponding year.					
County	**2001**	**2002**	**2003**	**2004**	**2005**
Island	3	3	3	3	3
San Juan	5	4	5	3	3
Skagit	3	1	2	2	2
Snohomish	4	6	6	5	5
Whatcom	8	7	7	7	7
TOTALS	**23**	**21**	**23**	**20**	**21**
Differences: *- or +*		-2		-3	-3

This table addresses the number of certified SEIs in the North Region over a five-year period. It shows a reduction of 2 SEIs (9%) over five years. Although the numbers may look fairly stable, SEIs believe that some parts of the region have been operating with a bare-bone minimum of SEIs to serve their community training needs.

For example, San Juan County numbers have dropped and another SEI is potentially expected to not re-certify because of the "new SEI certification requirements". This puts a greater burden on the SEIs that are still trying to keep up with the new requirements. San Juan County instructors already have expressed challenges with the geographic layout (multiple islands) of their county. With the new certification requirements, the SEIs feel heavily burdened to maintain their certification. Specifically, the new requirement of peer evaluation has created the most challenges.

2. Need Statement:

The following information highlights the training needs of the North Region Prehospital EMS System. The needs include:

- There is a need for a coordinated evaluation of additional public safety personnel needs. There is limited participation by other public safety personnel in local and regional council meetings.
- More AEDs are required for public safety personnel, not directly associated with pre-hospital EMS.
- Recruitment and retention of EMS providers
    - Rural volunteer EMS provider
    - Continued funding for training and equipping rural volunteer providers
    - Helping volunteer personnel comply with additional training requirements relating to Weapons of Mass Destruction (WMD)
- Initial Provider Training and Continuing Education/OTEP
- Further development of Regional OTEP programs
- Other Programs to support:

- Maintaining a functional group of EMS Instructors
- Addressing the issue of SEI burnout and recruitment
- Conducting annual SEI workshops
- Rural AED Grant Coordination and Training
- Promotion of EMS Conferences throughout the State.
- Work with local EMS Councils in the development of a county training and education manual – similar to Whatcom County.
- Detailed description of the each county training plan in place.
- Description of the training courses that community colleges provide and the associated cost.

Opportunities for Skill Maintenance

- North Region Website and links need to be made available regarding scheduled training in the Region.
- BLS, ILS and ALS OTEP provide opportunities for skills maintenance.
- SEI Workshop – Part II of the event will focus on Skill Maintenance – lay out the skills and assign.

Training/Education Aids and Equipment

Prehospital providers in the region have identified their training/education aids and equipment needs as follows:

- Laptop computer/video projector
- VCR/DVD/TV
- PowerPoint Software
- Mobile White Boards
- CD Training Aids
- Up-to-Date Videos

Note: See actual summary of North Region Requests in Plan **Appendix 1.**

Basic and State-of-the-Art Emergency Medical Care Equipment

Prehospital providers have identified medical care equipment needs to support their provision of emergency medical care as follows:

- Rhythm Generators
- Manikins
- ALS & IV Trainers:
  - Adult, Junior, Infant CPR (preferable shock-able and tube-able)
  - Airway, IV, OB, IO
  - IV Arms

- EMT Class Equipment for 12-Lead and full size simulators, anatomical models simulation kit for moulage
- Needles, IVs, Combitubes, Glucose Meter, etc.

Note: See actual summary of North Region Requests in Plan **Appendix 1.**

3. Goals:

GOAL 1: North Region has a model recruitment and retention plan for volunteer provider agencies.

Objective 1 (By Nov. 1st of each year): Education Committee to address and review regional volunteer training and retention issues through an annual survey addressing the following challenges: 1) Gain/Loss of Volunteer Personnel Turnover, 2) Include a distinction of the personnel that is consistent, versus same numbers of personnel, but new personnel, 3) Focus on results.

- ***Strategy 1:*** Document these surveys and update the Education Committee and Regional Council.
- ***Strategy 2:*** Develop an annual summary, reporting trends, agencies that are successful, what is working.
- ***Strategy 3:*** Provide local EMS councils a copy of survey results.
- ***Strategy 4:*** Work with local EMS councils and County Fire Chiefs Association to address the county data.
- ***Strategy 5:*** Eventually encourage local EMS councils to conduct the survey each year and provide response to the region.

Objective 2 (December Each Year): North Region will conduct an annual *Volunteer Recruitment and Retention Workshop*, focusing on educational features of volunteerism.

- ***Strategy 1:*** Create a "Marketing Packet" to highlight the positive aspects of volunteerism.
- ***Strategy 2:*** Bring together volunteer provider agencies to facilitate discussions regarding training issues to include concerns of increased costs as a result of turnover and also issues regarding the additional training standards and requirements and the affect in volunteer communities.
- ***Strategy 3:*** Create a core work group of successful volunteer agencies to assist with ongoing planning and to provide regional leadership.

Projected Costs: Funding for a professional speaker (travel and meals also), appropriate meeting room and refreshments would cost the Region approximately $2,500. This does not include planning time for North Region staff to coordinate.

System Costs: N/A
Regional Council Costs: $2,500 for seminar costs. Staff costs include $2,500. TOTAL: $5,000

GOAL 2: A sufficient prehospital instructor pool in the North Region.

Objective (By Dec. 31st of each year): North Region will conduct formal training for instruction – professional development for augmenting instructor pool through the 40-hour DOT class, *DOT Guidelines for Educating EMS Instructors.*

- ***Strategy:*** North Region will work with Northwest Region to plan their annual Instructor Training Class each year.

Projected Costs:
System Costs: $4,500 for Class or $125 per student.
Regional Costs: $ 1,000 planning time for North Region staff to coordinate.

GOAL 3: North Region SEI recruitment and retention issues are addressed through regional cooperative effort.

Objective (May 2006, May 2007): North Region to conduct an annual SEI Workshop to address SEI issues and needs, as well as to share teaching methods.

- ***Strategy 1:*** provide information to enable Instructors to contact other instructors in the region to schedule time for peer evaluation, providing specialty topics and build a table that lists the dates of classes.
- ***Strategy 2:*** Build a regional calendar and include initial classes (post on the North Region website).
- ***Strategy 3:*** Identify training sites – include on the calendar (post on the North Region website).
- ***Strategy 4:*** MSO and County MPDs need to sign off on the plan.
- ***Strategy 5***: Instructor to ask for a lesson plan. Have lead instructor provide a guideline of expectations.

Projected Costs:
System Costs: N/A
Regional Costs: $1,500 planning time for North Region staff to coordinate and $500 for meeting room and refreshments.

GOAL 4: Region has a sufficient prehospital State Evaluator pool.

Objective 1 (June 2006/June 2007): The NREMS Education Committee to assist with the development of a support program for the recruitment and qualification of more State Evaluators in the North Region, and to assist with the retention of the State Evaluators currently being used in the North Region.

- ***Strategy 1:*** Educate the prehospital arena of the importance and need for State Evaluators in the North Region.
- ***Strategy 2:*** Encourage prehospital providers to become State Evaluators and assist them in any way possible. This would include the development of an informational brochure that explains what a state evaluator does, the process of becoming a State Evaluator, and the importance of the State Evaluator.

- ***Strategy 3:*** Create a forum for State Evaluators to meet and discuss the issues they face on a regular basis, and allow them to discuss "Best Practices" so the evaluations being performed are uniform.

Projected Costs:
System Costs: N/A
Regional Council Costs: $2,000 for planning and brochure development time for the North Region Staff.

GOAL 5: The entire North Region has comprehensive, prioritized Prehospital training.

Objective 1 (May 2006, May 2007): Continue to annually fund community-based programs now in place.

- ***Strategy 1:*** Utilize the education committee forum to distribute education funds (North Region Community Based Education Funds) to Prehospital agencies, through each local EMS Council office.
- ***Strategy 2:*** Due to limited funding from DOH, exploring other funding options (DOH Prehospital Needs Grant) is essential to provide additional training support.

Projected Costs:
System Costs**:** The Region does not have this information, however, it is believed to be quite high.
Regional Costs: $60,000 for grant and an additional $2,000 for meeting facilitation and staff time.

GOAL 6: North Region has a Regional OTEP Program.

Objective 1 (Quarterly Meetings): North Region regularly works with Education Committee membership to develop and implement a regional OTEP Program by January 2007.

- ***Strategy 1:*** North Region office to schedule regular meetings to develop program.
- ***Strategy 2:*** North Region to recommend a sub-committee chair to facilitate this program development.
- ***Strategy 3:*** Each county representative to bring training requirements and county protocols to appropriately plan.
- ***Strategy 4:*** Plan first year's topics. Plan the remainder of topics for the following two years only after first years topics are under way.
- ***Strategy 5:*** Review DOH online PowerPoint presentation regarding OTEP.
- ***Strategy 6:*** Discuss costs and develop a budget.
- ***Strategy 7:*** Develop a timeline for January 2007 implementation.

Projected Costs:
System Costs: Estimated to be $3,000.
Regional Council Costs:

GOAL 7: North Region coordinates training/education aids and equipment needs through the DOH Prehospital Needs Grant.

Objective (September 2005): North Region office to work with the DOH to help coordinate the Prehospital Needs Grant.

- ***Strategy 1:*** At least annually, the Education committee members will analyze their county as to their specific needs, and develop equipment and training needs list to be sent to the region.

- ***Strategy 2:*** The North Region Education Committee will meet at least annually top discuss the training and equipment needs throughout the region.

Projected Costs:
System Costs: $159,145.00: Total estimated costs for needed training/education aids and equipment needs **(See Appendix 3: North Region Equipment Needs/Requests).**

Regional Council Costs: $2,500 for planning time for regional office.

GOAL 8: The North Region is educated about Geriatric Emergencies.

Objective (2005-2006): The North Region will coordinate at least one Geriatric Education for Emergency Medical Systems training program.

- ***Strategy 1:*** Determine the expense of hosting a Geriatric Education for Emergency Medical Services (GEMS) training program.

- ***Strategy 2:*** Select date and location as to where to host the training.

- ***Strategy 3:*** Advertise and encourage members of the North Region to attend the training program. Also, Encourage Senior EMT Instructors, CBT Instructors, and OTEP instructors to attend the GEMS Instructor course to facilitate local level training.

Projected Costs:
System Costs: $3,000
Regional Council Costs: Research and advertisement cost for North Region Staff - $500.

D. Verified Aid and Ambulance Services:

1. North Region System Status:

Table D – North Region: Numbers of Verified Trauma Services, By Level and Type

North Region		DOH Approved 2003-05		
County	Service Type	Minimum	Maximum	Current
North Region Summary	Aid – BLS	43	79	38
	Aid – ILS	1	3	0
	Aid – ALS	4	10	0
	Amb – BLS	48	80	31
	Amb – ILS	0	5	1
	Amb – ALS	19	25	17
	REGION TOTALS	**115**	**202**	**87**
Island County	Aid – BLS	8	10	4
	Aid – ILS	0	0	0
	Aid – ALS	1	2	0
	Amb – BLS	6	7	2
	Amb – ILS	0	0	0
	Amb – ALS	1	2	1
	TOTALS	**16**	**21**	**7**
San Juan	Aid – BLS	4	12	1
	Aid – ILS	0	0	0
	Aid – ALS	3	8	0
	Amb – BLS	4	12	1
	Amb – ILS	0	0	0
	Amb – ALS	3	8	2
	TOTALS	**14**	**40**	**4**
Skagit	Aid – BLS	13	27	19
	Aid – ILS	0	0	0
	Aid – ALS	0	0	0
	Amb – BLS	13	27	1
	Amb – ILS	0	0	0
	Amb – ALS	3	3	3
	TOTALS	**29**	**57**	**23**
Snohomish	Aid – BLS	10	10	9
	Aid – ILS	1	2	0
	Aid – ALS	0	0	0
	Amb – BLS	12	15	14
	Amb – ILS	0	4	1
	Amb - ALS	11	11	10
	TOTALS	**34**	**42**	**33**
Whatcom	Aid – BLS	8	20	5
	Aid – ILS	0	1	0
	Aid – ALS	0	0	0
	Amb – BLS	13	19	13
	Amb – ILS	0	1	0
	Amb - ALS	1	1	1
	TOTALS	**22**	**42**	**19**

Table E: Trauma Response Areas

Table E-1 - Trauma Response Areas – Island County

Area #	ISLAND COUNTY - DESCRIPTION	# Verified Services, by level					
		A	B	C	D	E	F
1	Camano Island	-	-	-	1	-	1*
2	Camano Island State Park and Cama Beach	-	-	-	1	-	1*
3	North Whidbey Island, within boundaries of 15D02, excluding city of Oak Harbor	1	-	-	-	-	1
4	City of Oak Harbor	1	-	-	-	-	1
5	NAS Whidbey (Federal military property)	-	-	-	1	-	1
6	Deception Pass State Park	1	-	-	-	-	1
7	Joseph Whidbey State Park	1	-	-	-	-	1
8	Central Whidbey Island, within boundaries of 15D05, including city of Coupeville	1	-	-	-	-	1
9	Fort Casey State Park	1	-	-	-	-	1
10	South Whidbey Island, within boundaries of 15D03, including city of Langley	1	-	-	-	-	1
11	South Whidbey State Park	2	-	-	-	-	1

Service currently provided by a Snohomish County EMS agency. See below.

KEY: **A** (Aid-BLS), **B** (Aid – ILS), **C** (Aid – ALS), **D** (Amb – BLS), **E** (Amb – ILS) and **F** (Amb – ALS)

Island County - Current Status

Verified trauma aid response throughout the county is currently provided by local fire agencies. On Camano Island, BLS transport is provided by Camano Fire and Rescue (15D01), and ALS transport from Stanwood in Snohomish County (31X07). See notes below regarding expected changes in the future. On Whidbey Island, ALS transport is provided by Whidbey General Hospital (15X01).

Island County consists of two islands: Whidbey (accessible from the North via Hwy 20 from Skagit County, from the South via ferry through); and Camano (accessible only from the Northeast via Hwy 532 through Snohomish County.) Oak Harbor is an urban area on Whidbey Island. The rest of the County is considered rural. There are no direct land routes or scheduled ferries between the two islands.

Island County EMS Council will be requesting minor reductions to Min/Max levels to tighten up numbers to a realistic level of planning. Before requesting these changes, more work will be required of the local Council and Regional Council to help substantiate that current levels of service are appropriately being met by addressing demographics, call volume, response times, etc.

Table E-2 - Trauma Response Areas – San Juan County

Area #	SAN JUAN COUNTY - DESCRIPTION	# Verified Services, by level					
		A	B	C	D	E	F
1	Orcas Island	-	-	-	-	-	1
2	Lopez Island	-	-	-	1	-	-
3	Shaw Island	1	-	-	-	-	-
4	San Juan Island	-	-	-	-	-	1
5	Other islands in Hospital Dist #1: Henry, Stuart, Spieden, Brown, Johns, Pearl	-	-	-	-	-	-
6	Multiple other islands	-	-	-	-	-	-

KEY: **A** (Aid-BLS), **B** (Aid – ILS), **C** (Aid – ALS), **D** (Amb – BLS), **E** (Amb – ILS) and **F** (Amb – ALS)

San Juan County - Current Status

San Juan County consists of numerous islands (172 of which 40 are residentially occupied.) Four major islands (Lopez, Orcas, San Juan and Shaw) have scheduled Washington State Ferry service. The other islands are accessible only by private boat or airplane. Total shoreline mileage is 165.

A few of these islands have year-round residents, but the smallest are occupied only during the "tourist season". For trauma-response purposes, the four major islands are considered rural, the others are wilderness since they are not accessible by land.

On the four major islands, verified trauma aid response is provided by local EMS agencies (three fire districts, one hospital district). On Shaw Island, currently there is no verified transport service, (see anticipated changes in this section) For the smaller islands, there is no direct "verified trauma response", although under cooperative arrangements, the Sheriff's Office provides water transport and San Juan EMS (28X02) provides equipment and personnel to islands outside the boundaries of local EMS agencies.

Airlift Northwest ALNW (ALS helicopter) and Island Air Service (BLS fixed wing) are important components of San Juan County's trauma response plan. For helicopter access, all EMS agencies are trained on landing zone identification and preparation, and provision of GPS coordinates to ALNW is routine. When weather or other considerations make ALNW unavailable, backup is provided by either US Coast Guard, helicopter transport only from Port Angeles, or US Navy Air (helicopter with Flight Surgeon) from NAS Whidbey.

Because San Juan County potentially has many geographic areas that will eventually need services provided, the San Juan County EMS Council is allowing expansion in their Min/Max planning. However, current Min/Max levels are higher than any anticipated planning in the upcoming near future and will therefore be asking changes in levels to a more realistic level. Before requesting these changes, more work will be required of the local Council and Regional Council to help substantiate that current levels of service are appropriately being met by addressing demographics, call volume, response times, etc.

Table E-3 - Trauma Response Areas – Skagit County

Area #	SKAGIT COUNTY - DESCRIPTION	# Verified Services, by level					
		A	B	C	D	E	F
1	City of Anacortes	-	-	-	1	-	1
2	City of Burlington	-	-	-	-	-	1
3	City of Concrete	-	-	-	-	-	1
4	City of Hamilton	1	-	-	-	-	1
5	City of La Conner	1	-	-	-	-	1
6	City of Lyman	1	-	-	-	-	1
7	City of Mount Vernon	1	-	-	-	-	1
8	City of Sedro Woolley	1	-	-	-	-	1
9	(?Dir) of Mount Vernon, within boundaries of 29D01	1	-	-	-	-	1
10	West of Mount Vernon, within boundaries of 29D02	1	-	-	-	-	1
11	Area surrounding Conway, within boundaries of 29D03	?	-	-	-	-	1
12	East of Mount Vernon, within boundaries of 29D04	1	-	-	-	-	1
13	Northwest of Mount Vernon, within boundaries of 29D05	1	-	-	-	-	1
14	*(?Dir)* of Burlington, within boundaries of 29D06	-	-	-	-	-	1
15	East of Mount Vernon, within boundaries of 29D07	1	-	-	-	-	1
16	North and East of Sedro Woolley, within boundaries of 29D08	1	-	-	-	-	1
17	East of Mount Vernon, within boundaries of 29D09	1	-	-	-	-	1
18	Area surrounding Concrete, within boundaries of 29D10	?	-	-	-	-	1
19	Southwest of Anacortes, within boundaries of 29D11	1	-	-	-	-	1

Area #	SKAGIT COUNTY - DESCRIPTION	# Verified Services, by level					
		A	B	C	D	E	F
20	West of Mount Vernon, within boundaries of 29D12	1	-	-	-	-	1
21	East of Anacortes, within boundaries of 29D13	1	-	-	-	-	1
22	North of Mount Vernon, within boundaries of 29D14	1	-	-	-	-	1
23	East of Conway, within boundaries of 29D15	1	-	-	-	-	1
24	West of Concrete, within boundaries of 29D16	1	-	-	-	-	1
25	Guemes Island	1	-	-	-	-	1
26	East of Concrete	1	-	-	-	-	1
27	North of Darrington, within boundaries of 29D24	1*	-	-	-	-	1*
28	Swinomish Reservation	1	-	-	-	-	1
29	Upper Skagit Tribe – "Helmic" area	1	-	-	-	-	1
30	Upper Skagit Tribe – "Casino" area	1	-	-	-	-	1
31	North Cascades National Park	Wilderness areas – service "as soon as possible" from nearest available units, regardless of county or verification status. Backup response from nearest available trauma verified service.					
32	Mount Baker Snoqualmie National Forest						
33	Okanogan National Forest						

***Service is provided by EMS agencies based in Snohomish County.**

KEY: **A** (Aid-BLS), **B** (Aid – ILS), **C** (Aid – ALS), **D** (Amb – BLS), **E** (Amb – ILS) and **F** (Amb – ALS)

Skagit County Current Status

Aid service throughout most of Skagit County is provided at the BLS level by local fire-response agencies, although some agencies around Concrete and further East have been reluctant to participate in medical responses.

Ambulance service is provided by three ALS-level agencies: one fire department based (Anacortes Fire Department); one a private not-for-profit organization (Aero Skagit), and one a quasi-department of county government (Skagit County Medic One/Skagit County EMS Commission).

All EMS services are coordinated and supported through the Skagit EMS Commission, whose members are appointed by the County Commission. A county-wide EMS levy has been in place since the late 1970's, which supplies both direct financial support and other services (e.g., medical supervision, training, etc.)

Skagit County EMS Commission currently has not requested changes to their Min/Max numbers.

Table E-4 - Trauma Response Areas – Snohomish County

Area #	SNOHOMISH COUNTY - DESCRIPTION	# Verified Services, by level					
		A	B	C	D	E	F
1	City of Arlington	-	-	-	-	-	1
2	City of Bothell (in Snohomish Co.)	-	-	-	-	-	2*
3	City of Darrington plus area within boundaries of 31D24 (also, combined with Skagit County 29D24)	-	-	-	2	-	1
4	Cities of Edmonds and Woodway	-	-	-	-	-	1
5	City of Everett	-	-	-	-	-	1
6	City of Lynwood	-	-	-	-	-	1
7	City of Marysville plus areas within boundaries of 31D12 and 31D20	-	-	-	-	-	1
8	City of Monroe plus area within boundaries of 31D03	-	-	-	-	-	1
9	City of Mukilteo	-	-	-	1	-	1
10	City of Stanwood	1	-	-	-	-	1
11	South of Everett, within boundaries of 31D01 (including cities of Brier, Mountlake Terrace and Silver Lake)	-	-	-	-	-	1
12	City of Snohomish and area within boundaries of 31D04	-	-	-	1	-	1
13	City of Sultan and area within boundaries of 31D05	-	-	-	1	-	1

Area #	SNOHOMISH COUNTY - DESCRIPTION	# Verified Services, by level					
		A	B	C	D	E	F
14	West of Snohomish, including city of Mill Creek and area within boundaries of 31D07	-	-	-	-	-	1
15	City of Lake Stevens and area within boundaries of 31D08	-	-	-	-	-	1
16	Area surrounding the part of Bothell located in Snohomish County, including area within boundaries of 31D10	-	-	-	1*	-	2*
17	Area surrounding city of Stanwood, within boundaries of 31D14	-	-	-	1	-	1
18	Area West of Marysville within boundaries of 31D15	1	-	-	-	-	1
19	Area surrounding Lake Roesiger, within boundaries of 31D16	1	-	-	-	-	2
20	City of Granite Falls, and surrounding area within boundaries of 31D17	-	-	-	1	-	1
21	Bryant, within boundaries of 31D18	-	-	-	1	-	1
22	Sylvana, within boundaries of 31D19	1	-	-	-	-	1
23	Arlington Heights, within area of 31D21	1	-	-	-	-	1
24	Getchell, within boundaries of 31D22	-	-	-	1	-	2
25	Robe Valley, within boundaries of 31D23	1	-	-	1	-	1
26	Oso, within boundaries of 31D25	-	-	-	1	-	1
27	City of Goldbar, plus area within boundaries of 31D26	-	-	-	-	1	1
28	Hat Island	-	-	-	1	-	1*
29	City of Index, plus area within boundaries of 31D28	-	-	-	1	-	1
30	Paine Field – Boeing	-	-	-	1	-	1
31	Snohomish County Airport	1	-	-	2	-	1
32	US Naval Station – Everett	1	-	-	2	-	1
33	Evergreen Speedway	-	-	-	1	-	1
34	Mt Baker Snoqualmie National Forest	Wilderness areas - service "as soon as possible" from nearest available units, regardless of county or verification status. Backup response from nearest available trauma verified service.					

*** Area trauma response is from King County.**

KEY: **A** (Aid-BLS), **B** (Aid – ILS), **C** (Aid – ALS), **D** (Amb – BLS), **E** (Amb – ILS) and **F** (Amb – ALS)

Snohomish County - Planning Strategy

The Snohomish County EMS system is the most complex in the North Region, hosting 20 cities, and a population base of nearly 620,000. Between 1990 and 2001, the county's population grew 32.9%. Among counties in Washington State, this is the second largest numeric gain in population since 1990 (King County showed the largest numeric gain). This increase translates into an average annual population growth rate of 2.6% for Snohomish County since 1990 – the fastest rate of population growth among the four counties in the central Puget Sound region. With anticipated continued population growth in the county, efficient planning at the local EMS council level is crucial.

Continued population growth, as well as disruption of "traditional" funding sources could prompt agencies to consolidate and/or others to disassociate. Specific changes cannot be predicted at this time, but the Snohomish EMS Council will be actively monitoring and encouraging agencies to work together with "upfront" planning. For these reasons, Min/Max levels in Snohomish County need to be tight – to the point of reflecting current realities.

Future requests for increased levels of service need to be developed cooperatively and collaboratively at the local EMS council level. Efficient planning will include a cost effective plan that does not duplicate services and provides the highest level of care possible to the community it serves.

Snohomish County EMS Council will also work collaboratively with the North Region to identify need and distribution of services and MIN/MAX numbers for the Snohomish County communities to be recorded in the North Region Plan. Any changes to MIN/MAX levels will need to be submitted to the Regional Council who will submit a request for a ***Plan Change*** to the State DOH. The local council

understands that the North Region does not approve or grant licensure or verification, but is an agency to help promote appropriate planning. The only entity to approve or grant licensure and/or verification is the State Department of Health. The State Department of Health is also the only entity to "approve" MIN/MAX numbers requested.

Current Min/Max levels in Snohomish County are not tight enough to reflect current realities and to encourage appropriate planning. Snohomish County will be requesting some reductions in Min/Max numbers. Again, the intention of the local council is to promote upfront planning at the local level, requiring a strategic business plan, using the tools provided by the State DOH for all future requests for upgrades. Before requesting these changes, more work will be required of the local Council and Regional Council to help substantiate that current levels of service are appropriately being met by addressing demographics, call volume, response times, etc.

Snohomish County Min/Max Planning Process

In summary, the Snohomish County EMS Council initiated and follows a specific process, utilizing the most current DOH tools, to support and facilitate cooperative changes that are requested or required for service levels or areas and Min/Max changes. The County MPD and the Council initiated this process several years ago and to date has proven to be very functional and successful in realizing our goals of organized cooperative transitions where all the affected agencies participate and come to agreement.

The structure of the process includes facilitated meetings with, the MPD and the EMS Council pre-hospital committee and all agencies involved or affected. The committee is made up of the Executive Board members plus individuals with appropriate expertise based on the specific action being considered. Individuals directly connected with any involved/affected agency are asked to exclude themselves if a conflict of interest may exist. In instances where all parties are initially in agreement this process is allowed to proceed more informally then is required when some concerns must be addressed in a formal, facilitated setting. When an agreement is reached the council then assists the agencies in facilitation of the changes with the North Region Council and DOH.

In the event all parties should be unable to formulate a working agreement and one or more agencies choose to pursue a change without agreement, the MPD and the Council would review the current Regional Plan and provide a comprehensive report of the areas that are unresolved to all interested parties, to include the North Region and DOH.

Snohomish County – Current Status

BL-Aid service is provided throughout mostly rural areas of the county by 9 fire department agencies. Each of these service areas receive 24/7 paramedic service from an existing ALS agency

ILS – Aid is provided on a partial basis by several rural agencies, however due to the rural and volunteer nature of these agencies, they have been unable to provide 24/7 ILS independently, however they do receive 24/7 paramedic service from an existing ALS agency.

BLS-Ambulance service is currently provided by 14 agencies mostly fire department based and two private agencies. . Each of these service areas receive 24/7 paramedic service from an existing ALS agency

ILS-Ambulance service is provided by one agency (Snohomish County FPD#26 in Gold Bar), which also provides partial paramedic services with volunteers, however due to the rural and volunteer nature cannot provide 24/7 paramedic service independently, however they do receive 24/7 paramedic service from an existing ALS agency.

ALS-Ambulance service is currently provided by 10 agencies, which provide service to all areas of the county. Where prompt ALS response is delayed, BLS-ALS rendezvous is the norm.

The current status of each level of service is providing adequate and appropriate care throughout the county. However, before requesting these changes, more work will be required of the local Council and Regional Council to help substantiate that current levels of service are appropriately being met by addressing demographics, call volume, response times, etc.

Table E-5 - Trauma Response Areas - Whatcom County

Area #	Description	# Verified Services, by level					
	Whatcom Co.	A	B	C	D	E	F
1	City of Bellingham	-	-	-	-	-	1
2	Bellingham, within boundaries of 37D03	-	-	-	1	-	1
3	Bellingham, within boundaries of 37D04	-	-	-	1	-	1
4	Marietta, within boundaries of 37D08	1	-	-	-	-	1
5	Lake Samish, within boundaries of 37D09	-	-	-	1	-	1
6	Bellingham, within boundaries of 37D10	1	-	-	-	-	1
7	City of Lynden	-	-	-	1	-	1
8	City of Ferndale	-	-	-	-	-	1
9	Ferndale, within boundaries of 37D07	1	-	-	-	-	1
10	City of Blaine	-	-	-	-	-	1
11	City of Everson	-	-	-	-	-	1
12	Everson, within boundaries of 37D01	-	-	-	1	-	1
13	City of Sumas	-	-	-	-	-	1
14	Sumas, within boundaries of 37D14	-	-	-	1	-	1
15	City of Nooksack	-	-	-	-	-	1
16	City of Newhalem	-	-	-	-	-	1*
17	Geneva, within boundaries of 37D02	-	-	-	1	-	1
18	Point Roberts, within boundaries of 37D05	-	-	-	1	-	-
19	Chuckanut, within boundaries of 37D06	-	-	-	1	-	1
20	Lummi Island, within boundaries of 37D11	-	-	-	1	-	1
21	Birch Bay, within boundaries of 37D13	-	-	-	1	-	1
22	Acme, within boundaries of 37D16	-	-	-	-	-	1
23	Sandy Point, within boundaries of 37D17	1	-	-	-	-	1
24	S. Lake Whatcom, within boundaries of 37D18	1	-	-	-	-	1
25	Glacier, within boundaries of 37D19	-	-	-	1	-	1
26	Mount Baker Snoqualmie National Forest	Wilderness areas - service "as soon as possible" from nearest available units, regardless of county or verification status. Backup response from nearest available trauma verified service.					
27	North Cascades National Park						
28	Okanogan National Forest						

*** Response is from a Skagit County trauma verified service.**

KEY: **A** (Aid-BLS), **B** (Aid – ILS), **C** (Aid – ALS), **D** (Amb – BLS), **E** (Amb – ILS) and **F** (Amb – ALS)

Whatcom County Current Status, December 2004

BLS aid and ambulance service throughout most of the county is provided by local fire agencies. The Bellingham Fire Department provides ALS ambulance throughout the county, under a city-county agreement.

Before requesting changes, more work will be required of the local Council and Regional Council to help substantiate that current levels of service are appropriately being met by addressing demographics, call volume, response times, etc.

Current Formal Regional Process for Determining Need and Distribution of Verified Trauma Care Services

The North Region EMS & Trauma Care Council *Pre-Hospital Committee* has developed a written formal process for reviewing Min/Max numbers and review of applications for new services. The following guidelines have been developed:

Current Formal Regional Process for Determining Need and Distribution of Verified Trauma Care Services

The North Region EMS & Trauma Care Council *Pre-Hospital Committee* has helped in the development of a written formal process for reviewing Min/Max numbers and review of applications for new services. The following guidelines have been developed:

ROLE: The role of the North Region EMS & Trauma Care Council is strictly an advisory role that includes planning at the local level and regionally to determine need and distribution of services. This role also includes the facilitation of a bi-annual review of each local EMS Council's recommended MIN/MAX numbers that are to be published in the North Region EMS and Trauma System Plan.

The role of the Regional Council is to encourage effective processes and efficient planning to identify the need and distribution of services within the five counties in the North Region. The major role for the Regional Council is focused with "upfront planning", specifically, setting MIN/MAX levels to encourage strategic and cost effective planning, to reduce the duplication of services.

AUTHORITY: The Washington State Department of Health is the only entity that has authority to "approve" licensure or verification requests and MIN/MAX numbers submitted.

The North Region EMS & Trauma Care Council does not have the authority to "approve" or to independently change MIN/MAX numbers, but only to serve as an administrative planning entity, working with the local EMS councils and/or commission and the State DOH.

The local EMS council or commission is tasked with "up front" planning to identify the need and distribution of services for their communities, through submitting MIN/MAX numbers to the Regional Council.

MIN/MAX Numbers: MIN/MAX numbers are the guide used by the State to determine whether an application request to provide service should be considered or not. If the application is not reflected in the EMS & Trauma System Plan, via MIN/MAX numbers, the application will not be processed until a ***Plan Change Request*** is made by the Regional Council with the MIN/MAX numbers to reflect the need. This ***Plan Change Request*** will need to be accompanied with the required information as outlined by tools provided by the State DOH. This planning action will be driven by the local EMS council or commission, through the North Region office.

If MIN/MAX numbers allow, the role of the Regional Council is solely to identify that the request is within the MIN/MAX levels of the North Region Plan, developed by the local EMS council or commission.

If MIN/MAX numbers do not reflect anticipated increases in service, then the role of the Regional Councils is solely to identify that the request is not with the MIN/MAX levels of the North Region Plan, developed by the local EMS councilor commission.

LOCAL PROCESS: Each local EMS Council or Commission will develop its own process for deciding recommended MIN/MAX numbers. The local EMS council or commission will need to regularly facilitate collaborative and cooperative planning at the local level.

The local EMS council or commission is to utilize the tools provided by the State DOH to support any requests for changes in their MIN/MAX numbers and submit this to the Regional office, with a letter signed by their Chair, requesting changes in their MIN/MAX levels.

Changes in recommended MIN/MAX numbers will require action by the Regional Council, but only after the local EMS Council or Commission has completed their assessment and review process and has submitted their request to the Regional Council office.

The Regional Council collects the Local Councils recommendations and incorporates them into the Regional Plan by requesting this change from the State DOH.

The Regional Council will encourage the local Councils to develop a consistent process for reviewing and recommending changes, through the Regional Prehospital Committee.

ACTUAL NUMBERS NOT LESS THAN MINIMUM: It was recommended by the North Region EMS & Trauma Care Council *Pre-Hospital Committee* that actual numbers should not be less than the MIN number.

MAX NUMBERS REFLECT CURRENT REALITY: It was also recommended by the North Region EMS & Trauma Care Council *Pre-Hospital Committee* that MAX numbers in most cases reflect current reality in order to encourage efficient planning. Anticipated increases in services need to be clearly defined and specifically identified before increasing MAX levels, unless a community is clearly underserved.

WRITTEN RECOMMENDATION BY LOCAL EMS COUNCIL CHAIR: After the review process has been completed at the local council level, the local council shall submit to the North Region Prehospital Committee a written recommendation using appropriate documentation as designated by DOH signed by the local council chair.

PREHOSPITAL COMMITTEE REPORT TO REGIONAL COUNCIL: The North Region EMS & Trauma Care Council *Pre-Hospital Committee* will provide a report to the Regional Council of the recommendations provided by the local EMS councils.

Regional Council business will include a vote to process the requests provided by the local EMS councils or commissions before forwarding to the Washington State Department of Health for their approval.

WRITTEN NOTIFICATION TO LOCAL EMS COUNCIL: It is recommended a written response by the North Region EMS & Trauma Care Council office to the local council identifying the action taken by the Regional Council be provided.

Need: A need for the North Region includes the development of a better regional guideline document that refers to the WAC for determining need and distribution of verified trauma care services.

Other System Status

2010 Olympics: The 2010 Olympics will be hosted in Canada (Vancouver and Whistler). There will be 17 days of *Olympic Games* events (February 12th – 28th 2010) and 10 days of Paralympic Games (March 12th – 21st 2010). North Region planning will occur in the next biennial planning cycle.

2. Need Statement:

- The North Region Council supports the DOH effort to review and revise the verification planning process. Our intention is to participate actively with DOH and the other EMS/Trauma Regions in this project, and then update our plan as quickly as possible after that to reflect a more rational approach to evaluating the needs and distribution of prehospital trauma services. The timing of this goal is dependent on the completion of the project, so no date(s) can be set at this time. Our hope is that the state-level review will be completed well before the end of 2006, and that our Regional Plan could be updated by early 2007.

- The Regional Council plans to update the Formal Regional Process document to have MAX NUMBERS to reflect only current reality. Changes in planning must go through the formal DOH application process and through the local and regional planning process. It has been determined that having larger numbers than current reality could create a situation of an agency being allowed to use the additional MAX number simply because the numbers reflected future growth. The Regional Council wants to insure that appropriate local and regional planning is completed before the State DOH grants an upgrade in service. The Regional Council does not want to create a situation where any agency could start a service, without a solid plan reviewed by local and regional prehospital and MPD leadership.

- A need for the North Region includes the development of a better guideline document that includes WAC for determining need and distribution of verified trauma care services.

- Verification of all Prehospital agencies providing medical response is needed in the regional system. The Regional Council has offered equipment grants to all Prehospital agencies since 1991 in order to assist these agencies in meeting trauma verification standards.

Summary of Need

- **Significant Reductions in Maximum Numbers of Verified Services to Reflect Current Reality and Anticipated Planned Changes:** The North Region will be proposing significant reductions at all levels of verification. At the county level, the few increases are for anticipated (and planned) upgrades in existing services, and are coupled with reductions in other levels. No new services are expected at this time.

- **Local Planning Encouraged and Needed:** The Regional Council requires formal action of the local county EMS Council before any recommended changes to the DOH-approved min/max numbers are included in the regional plan. This has been accomplished in all counties but Skagit.

- The Regional Council has participated in meetings with all local county EMS councils. Many of the local councils will propose changes to reflect tighter numbers, reflecting a more accurate and realistic summary of need and distribution of services in the region. Before requesting these changes, more work will be required of the local Council and Regional Council to help substantiate that current levels of service are appropriately being met by addressing demographics, call volume, response times, etc.

- **Ambulance ALS Category Needs Current Reality for Min/Max:** Discussions with local county EMS councils have identified the need to approach min/max planning for Ambulance ALS services to reflect current reality. Because of the demographic and economic impact that ALS services have on a community, changes (upgrades or new services) with ALS services can potentially become a political arena that has the prospect for degradation in service. As a result of adding additional min/max numbers to anticipate future planning, a lack of appropriate planning at both the local and regional levels could potentially occur. In order to facilitate responsible planning, the Regional Council has recommended guidelines for ALS planning to reflect current reality. Any changes to min/max numbers require a verification application from DOH to be submitted with the appropriate plans to support a request for an increase in services for the region.

Trauma Response Area Maps: The "Trauma Response Area Maps" are from the FY2003-05 Plan, and are still accurate. Creating these maps is labor-intensive, and we expect the format and requirements to change as DOH and the Regional Councils collaborate to update the verification planning process. The Region will update maps as soon as possible after this is accomplished.

Needs for Changes in Levels of Service: Needs for changes in levels of service are addressed in the county-specific discussions. However, there are no formal requests being made to the State at this time.

The North Region Office will continue to work with the local councils on updating Min/Max numbers.

3. Goals:

GOAL 1: County specific Need and Distribution of Services documents remain current.

Objective 1 (July 2006): The Regional Council will participate in State planning for improving the verification process and update regional processes to reflect state guidelines.

Objective 2 (July 2006 and July 2007): The Prehospital Committee and Regional Council will annually work with local EMS councils to keep current with the status and future needs of each prehospital agency within the county, and overall, the entire region and provide an update on status in the required annual report to DOH.

- ***Strategies 1:*** The North Region Administrator and Prehospital Committee will work with the county councils to review and update the Needs and Distribution of Services documents on an annual basis.
- ***Strategy 2:*** The North Region Administrator and Prehospital Committee will provide technical assistance to any county council or prehospital agency seeking initial verification or change in current verification status as needed.

Projected Costs:
System Costs: N/A
Regional Council Costs: Travel and time for regional administrator. Administrative costs associated with Prehospital Committee meetings and possible travel. $2,000

E. Patient Care Procedures (PCPs), County Operating Procedures (COPs) and multi-county/inter-regional operations:

1. North Region System Status:

Patient Care Procedures (PCPs)

Patient Care Procedures as defined in WAC are written operating guidelines adopted by the regional EMS/TCC, in consultation with local EMS/TC councils, emergency communication (dispatch) centers and the MPDs, in accordance with statewide minimum standards. The Region operates with eleven (11) PCPs as listed in **Appendix 3**. The region regularly reviews the PCPs to ensure they reflect the needs of the Region. These PCPs include:

Patient Care Procedure #1	Access to Prehospital EMS Care
Patient Care Procedure #2	Identification of Major Trauma Patients
Patient Care Procedure #3	Trauma System Activation
Patient Care Procedure #4	Identification of the Level of Medical Care Personnel to be Dispatched to the Scene of Major Trauma and to Transport Major Trauma
Patient Care Procedure #5	Prehospital Response Times
Patient Care Procedure #6	Activation of Air Ambulance Service for Field Response to Major Trauma
Patient Care Procedure #7	Transport of Patients Outside of Base Area
Patient Care Procedure #8	Transport of Patients to Designated Trauma Centers
Patient Care Procedure #9	Designated Trauma Center Diversion
Patient Care Procedure #10	Activation of Hospital Trauma Resuscitation Team
Patient Care Procedure #11	Inter-facility Transfer of Major Trauma Patients

County Operating Procedures (COPs)

Some of the North Region counties have *County Operating Procedures*; however, the North Region has not collected and reviewed these. A goal for the North Region is to collect these from each county and post on the North Region website, along with the North Region PCPs.

Process for Development and Review of Regional PCPs and COPs

Through the North Region's Prehospital Committee, a sub-committee has been developed to initially review the region's PCP's. After this planning group reviews the PCP's, the region's Medical Program Directors provide input, and then it's submitted to the entire regional membership to review and vote. They are then submitted to DOH for final approval. Once approved, they are distributed throughout the region. The five counties in the North Region currently do not use County Operating Procedures. The Region will continue to evaluate the needs for such guidelines.

Recent Update of Region's PCP #5 – Prehospital Response Times

The newly developed Prehospital Committee, Patient Care Procedure Review Sub-Committee reviewed PCP #5, Prehospital Response Time to reflect state standards. The new PCP will be submitted in this planning and approval cycle.

Status of Multi-County and Inter-Regional Protocols and Operations

The Region continues to evaluate multi-county issues such as patient delivery. PCP #7 (Appendix D) describes responsibilities when prehospital personnel are required to transport patients outside of their base operating area (including cross country and throughout the region.)

Multi-County/Inter-Regional Issues

The Region continues to evaluate multi-county issues such as patient delivery. PCP #7 (**Appendix 3**) describes responsibilities when Prehospital personnel are required to transport patients outside of their base operating area (including cross county and throughout the region.)

Border States and Canada: Hospital and local public health emergency preparedness and response efforts in Washington State will continue to coordinate and cooperate with border-states (Idaho, Oregon, and Alaska) and internationally with British Columbia, Canada.

Representatives from the British Columbia Ministry of Health have attended the Washington State Emergency Management Council's Committee on Terrorism meetings to provide information to the Committee on Terrorism on the bioterrorism and disaster response system in British Columbia, as well as establish a dialogue regarding cross-border cooperation and planning.

Point Roberts, Whatcom County, US

Canadian/United States Cross Border Ambulance Transport: Whatcom County's Point Roberts is isolated from the United States, adjacent to mainland Canada, on the Strait of Georgia near the tip of the Point Roberts peninsula, extending south from British Columbia, Canada, and separated from the Washington mainland by Boundary Bay. The town can be reached overland from the United States only by going through British Columbia, or by private boat. There is ferry service from nearby Tsawwassan to Swartz Bay, on Vancouver Island.

Patients are transported into Canada through customs and then delivered to Whatcom County's Level II Hospital, St. Joseph's Hospital in Bellingham. During the border crossing, the border patrol will query the ambulance regarding number of passengers and then allow quick passing in a special lane. When crossing to the U.S., Port Roberts dispatch calls the U.S. customs ahead of time to open a lane for the ambulance.

ALS Transport: There has been an agreement in place since 1968 allowing Bellingham Medic One medics to provide patient care while in Canada. Because of the Canadian/U.S. border time challenges, Medic One has designated four rendezvous points, the most popular junction at Highway 99 and Highway 10, near Delta, where a small volunteer Canadian fire station is located and the half-way point for both ambulances. Generally the ambulances will arrive at Delta nearly the exact same time. For severe trauma, Airlift Northwest is contacted for transport of the patient.

Canadian Citizen Transport: When Point Roberts has a Canadian patient to transport, they bring them directly to Delta Hospital (a primary care center with 60 acute care beds) in Ladner, which is about 15 minutes from the border crossing.

2. System Need Statement:

Needs Within the Region Related to
PCPs, COPs, or Multi-County/Inter-Regional Protocols

- On-going review and revision of PCPs.
- The Region needs to continue to evaluate multi-county issues such as patient delivery (including MCI/all-hazards preparedness).

3. Goals:

GOAL #1: All Patient Care Procedures (PCPs) are reviewed annually and kept up-to-date with system adjustments and changes.

Objective #1 (FY05-07 Biennium): Review existing PCPs annually by December, 2006 and December, 2007and revise or expand as appropriate.

Objective #2 (FY05-07 Biennium): Review county COPs annually by December, 2006 and December, 2007and post them on the North Region website.

Projected Costs:
System Costs: Time for MPDs
Regional Council Costs: Time for the Regional office staff.

V. Designated Trauma Care Services

1. System Status:

Table F. Approved Minimum/Maximum (Min/Max) numbers of Designated Trauma Care Services (General Acute Trauma Services)

Level	State Approved		Current Status
	Min	Max	
II	2	3	0
III	4	6	5
IV	1	2	4
V	1	4	2
II P	0	0	0
IIIP	1	2	1

Table G. Approved Minimum/Maximum (Min/Max) numbers of Designated Rehabilitation Trauma Care Services

Level	State Approved		Current Status
	Min	Max	
II	2	3	2

North Region Hospitals by County

Hospital Facilities	Location	Designation Level	Licensed Beds
ISLAND COUNTY Whidbey General Hospital	Coupeville	Level III	51
SAN JUAN COUNTY Inter-Island Medical Center	Friday Harbor	Level V	
SKAGIT COUNTY Island Hospital Skagit Valley Hospital United General Hospital	 Anacortes Mount Vernon Sedro Woolly	 Level III Level III Level IV	 43 137 97
SNOHOMISH COUNTY Cascade Valley Hospital Darrington Clinic Providence Everett Medical Center Stevens Healthcare Valley General Hospital	 Arlington Darrington Everett Edmonds Monroe	 Level IV Level V Level III / IIP / IIR Level IV Level IV	 48 362 192 72
WHATCOM COUNTY St. Joseph Hospital	Bellingham	Level III/ IIR	253
TOTAL LICENSED BEDS			**1,082**

Regional System Planning

The Regional Council continues to provide a forum for discussion and planning for designation of trauma centers by hospital representatives through the Hospital Facility Committee, however the Council does not have a formal role in designation beyond assessing the need for designated trauma centers and recommending the number and levels of trauma centers required in the regional system.

Hospital participation has been good in the regional planning process. The Region plans to continue the use of the regional council committees as a vehicle for furthering system development work.

North Region Min/Max Numbers/Designation

Through evaluation of data, the Trauma Facilities Committee can make recommendations to the Regional Council regarding minimum and maximum numbers of trauma care facilities in the region. The Region continuously assesses methodology options for determination of min/max numbers for designation, using State criteria. Several hospitals in the North Region are "under designated" resulting in the appearance of gaps for some levels and too many designations for other levels. DOH assists hospitals interested in upgrading with interpretation of state approved min/max numbers. The Region needs to conduct an analysis for need and distribution of trauma services at all levels, using the established DOH criteria.

Hospital Facility Committee Min/Max Review

The Committee has reviewed the Min/Max numbers for the Region's hospitals:

- The Committee agreed to submit any changes via Attachment 3 to the Min/Max numbers for the Plan.

- The Committee discussed hospitals in the Region that will eventually be applying for a higher level designation (United General) and the Min/Max numbers should allow for these possible changes.

Nursing Shortages

Committee members have discussed the daunting challenges regarding nursing shortages and have reviewed possible actions for the region's nursing shortages (which is a national problem) that can be done by the committee. It was agreed that the best way for our committee to respond was for hospitals to continue their community outreach program, such as speaking in public schools, at career days, etc. The members would also like to have Community Outreach Programs to be discussed at our Hospital Facility meetings to highlight what's working and what is not.

North Region Trauma Patient Transfers

Trauma centers in the North Region transfer many patients each year to a higher level of care. As the only Level I hospital facility in Washington State, Harborview Medical Center receives almost all of these transfers.

Each designated trauma hospital has transfer criteria in place that reflect their ability to care for injured patients. Each hospital adherers to their own transfer criteria and have transfer agreements in place with Harborview. Several hospitals in the North Region are reviewing transfer criteria because of Harborview's ongoing capacity issues.

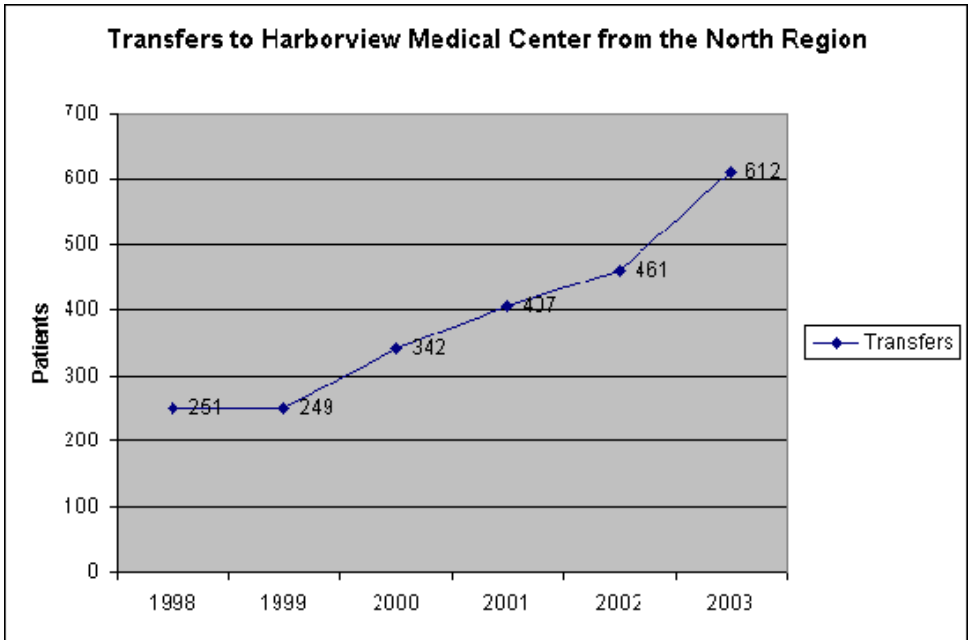
Harborview Transfers

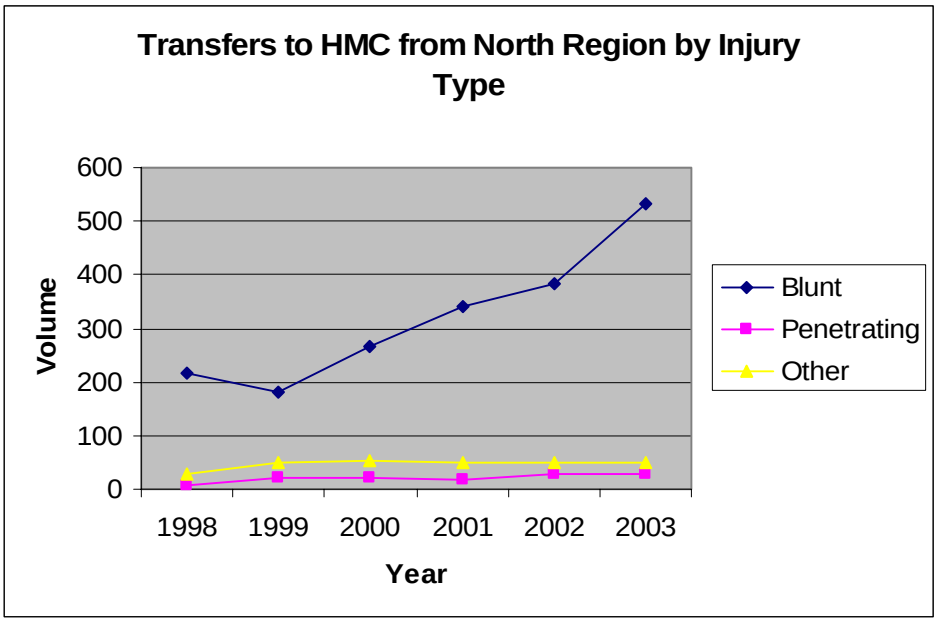
Harborview Medical Center being the only Level 1 hospital in the state has it challenges, regularly operating at capacity. Some regions in the state are having a difficult time transferring patients because Harborview is so over capacity, asking hospitals to hold their transfer patients as long as possible.

North Region hospital membership has reported that they have had some issues, especially with orthopedic patients. One hospital in North Region has been trying to attract an orthopedic surgeon to their area, with no success.

Harborview could handle more major trauma transfers, if they weren't inundated with minor injuries. Many of the hospitals in the region are now discussing and reviewing transfer criteria and working with Harborview for best possible patient care.

North Region Trauma Facility Transfer Volume





Injury Type	1998	1999	2000	2001	2002	2003
Blunt	215	180	266	341	384	533
Penetrating	8	21	23	18	29	29
Other	28	48	53	48	48	50
TOTALS	**251**	**249**	**342**	**407**	**461**	**612**

Hospital/Emergency Department Overcrowding

Hospitals in the region both continue to experience 1) substantial increases in trauma patient volume and 2) overall "high census" in sick patients presenting in the emergency room for treatment.

Several hospitals in the North Region have doubled their trauma patient volume over a four-year period. And when patients don't have a primary care physician and/or insurance, they go to the hospital to be treated. Data also shows that patient usage of the emergency department continues to dramatically increase, overcrowding the system.

Additionally, Emergency Department overcrowding ultimately results in more patient diversions and transfers. Emergency department overcrowding is compounded by limited ICU, surgery and bed capacity, as well as limited "specialty surgeons", resulting in patient transfers to facilities with appropriate personnel and equipment.

2. Need Statement

Hospital Designation Trauma System Summary of Need

- The Region needs to conduct an analysis for need and distribution of trauma services at all levels, using the established DOH criteria.

Nursing Shortages Summary of Need

- The Region's Hospital Facility Committee would also like to have Community Outreach Programs discussed to highlight what's working and what is not.

Trauma Patients Transfers Summary of Need

Referring trauma centers need to continue to monitor transfer patterns for:

- Appropriateness of transfer
- An understanding of which types of patients typically meet transfer criteria

Transfers need to be assessed for:

- Procedural efficiency
- Accuracy of information reporting to the receiving center

Education at the regional level promotes consistency of practice throughout the regional trauma centers:

- Know the type of patients transferred out of North Region
- Be able to discuss indications for out of region transfer
- Be familiar with methods of contact and sending patients to a higher level of trauma center care

3. Goals

Hospital Designation Trauma System Goals

GOAL 1: All North Region hospital facility representatives understand the designation process.

Objective (Quarterly Meetings): North Region's Hospital Facility Committee, in conjunction with DOH, works on an analysis of need and distribution of trauma services at all levels, using DOH criteria.

- ***Strategy #1:*** Provide a forum for hospital facility representatives to understand and discuss the hospital designation process.
- ***Strategy #2:*** Identify under-designated facilities and highlight potential barriers, using DOH criteria and tools provided.

Patient Transfers Goals

GOAL 2: Effective Transfer Criteria in place.

Objective 1 (June 2006/June 2007): North Region designated trauma services will review and evaluate their transfer criteria and collaborate with Harborview to optimize trauma transfer patterns within and outside the Region.

GOAL 3: Inter-facility transfers in the North Region are evaluated.

Objective 1 (June 2006/June 2007): Facilities/QI Committee review inter-facility transfers in the Region.

Projected Costs:
System Costs: N/A
Regional Council Costs: $5,000 to facilitate quarterly meetings.

VI. EMS and Trauma System Evaluation

A. Information Management

1. North Region System Status:

North Region - Where we are

- Very little information on local EMS runs is collected
- Most systems are paper based but are discussing transitioning to electronic
- Many systems use paper and scan into databases or do manual entry
- Few systems are compliant with the standardized NHTSA dataset
- Several models for data collection, but no uniformity or consistency across systems
- In general, there is an absence of data to drive reimbursement and policy decisions

State Planning

With federal grant funding the state is working to standardize EMS data elements collected at the state level with those being collected at the national level. The state's EMS Registry TAC is moving toward creating goals, objectives and strategies for this project, the creation of the Washington EMS Information System (WEMSIS).

Regional Planning

Several members of the Regional Council participate on the EMS Registry TAC. In the past year, the North Region has been involved in conducting several surveys, querying local EMS providers on the type of electronic software they use to collect data, as well as providing updates on the overall progress of the State's EMS Registry TAC. The Regional Council is committed to continuing to support the efforts of this project.

Status of EMS Data Collection within the Region

Prehospital EMS Summary

- Transporting agencies leave (MIRFs) Medical Incident Report Forms or equivalent at the hospital as required by WAC 246-976-330. MIRFs are completed for all patients, not just trauma patients.
- Non-transporting agencies give a copy of the initial MIRF or equivalent to the transporting agency so they can include it with the information given to the hospital.

Trauma Centers Summary

Trauma centers enter the available prehospital trauma patient care information in their records (Collector) and submit data to DOH.

Individual County Summaries:

- **Island County**
  Island County has one (1) ALS agency, Whidbey General Hospital/EMS Division, where prehospital data is collected on a paper MIR form. The hospital's data registrar then transfers this information to Collector and submits to DOH. Camano Island prehospital data is currently collected by Stanwood Ambulance, which provides a paper MIR form to the receiving hospital. Stanwood Ambulance uses Sun Pro for their electronic data collection.

- **San Juan County**
  San Juan County has two (2) agencies collecting and using electronic prehospital data. Orcas Island (BLS agency) currently collects data with their Firehouse software, with limited prehospital data available, but is exported into excel for review. San Juan Island EMS (ALS agency) has prehospital data collection software that is antiquated and cumbersome (Macon Systems ADBM) and is limited in its ability to provide useful information for QI. A paper MIR form is provided to a receiving hospital outside the county (there are no hospitals in San Juan County).

- **Skagit County**
  The three (3) ALS transport agencies in Skagit County use a custom on-line electronic data collection. The on-line custom software, I.D.E.A. was developed by a local organization, Emergency Reporting/Bellingham (Adrian Mintz). Currently, paramedics provide a paper MIR form to the receiving hospital; and then, later upload this information electronically to their server. Skagit County EMS Commission has one part-time employee to provide oversight for this program. Several other BLS agencies in the county are using Emergency Reporting for their fire data, as well as their prehospital data, which is currently limited. City of Mount Vernon currently uses Sunpro Fire RMS 5.0 for their fire data collection.

- **Snohomish County**
  Currently, Snohomish County has nine (9) ALS agencies that collect prehospital data on a paper MIR form that is submitted to the receiving hospital. The hospital's data registrar then transfers this information to Collector and submits to DOH. The City of Everett is currently forming a partnership with their Fire Department and Police Department to identify "hot spots" in the community where reporting of large amounts of data will be possible in the near future. The City of Arlington is currently collecting prehospital data for their own use.

- **Whatcom County**
  Currently, Whatcom County has one (1) ALS agency, which currently provides prehospital data to the receiving hospital on a paper MIR form. In the very near future (first quarter 2005), Bellingham Medic One is moving toward a new electronic software program, EMS Pro (Zoll product) that will allow them to submit electronic MIR forms to their one Level II hospital, St. Joseph Hospital in Bellingham. The medics will have a laptop computer on their ambulance, and with a stylus pen be able to key in prehospital data. This information will be submitted to the City of Bellingham's server to synchronize the data for billing and QI reporting.

North Region EMS & Trauma Care Council office has a *"Summary of Electronic Data Collection in North Region"* that can be made available, as requested.

Availability of EMS Run Times from Dispatch Centers

Run times are readily available from the dispatch centers in the region to prehospital agencies. Urban prehospital agencies often contract for regular reports and rural agencies are provided this information, as requested.

Status of Submission of Timely Prehospital Trauma Data to Receiving Trauma Services

The current status of timely prehospital trauma data is at about 85 to 90 percent according to Providence Everett Medical Center. The status of data submission to other hospitals in the region is unknown at this time. Occasionally, dispatch times and some vital signs are not being appropriately recorded. Hospital registrars sort out trauma events and follow-up with prehospital agencies to obtain the information

2. System Need Statement:

To improve the situation of information management to allow improved regional analysis and planning, as well as additional research, the region needs to have reliable EMS data. This would include electronic prehospital data reporting capabilities and data elements that are consistent the NHTSA data definitions. The region also needs to be able to continue to use its data for regional system trauma quality improvement.

3. Information System Goals:

GOAL 1: The North Region has reliable EMS data.

Objective 1 (Monthly): The North Region administrator to provide monthly updates at the Regional EMS Prehospital Committee meeting regarding the work and efforts of the State Data Registry TAC.

- ***Strategy 1:*** North Region administrator to update the Region's local EMS Councils with the State Data Registry TAC efforts, needs and successes at their meetings or my email updates.
- ***Strategy 2:*** The Regional Council assists the State DOH in the development of standards for data collection and definitions through representation at scheduled State Data Registry TAC meetings.

Objective 2: The Regional Council will host a WEMSIS Workshop in 2005.

Projected Costs:
System Costs:
Regional Council Costs: There will be hostess (meeting room/food/AV equipment) costs (up to $2,500) and administrative planning time to facilitate the WEMSIS Workshop.

GOAL 2: North Region is in compliance with state requirements for Prehospital trauma data submission

Objective 1(June 2006/June 2007): NREMSTCC Prehospital Committee and Hospital Facilities Committee conducts annual reviews for timely trauma run sheet submission to hospitals.

- ***Strategy 1:*** Request that the state bring reports of prehospital data submission compliance to regional Hospital Facilities and Prehospital Committee meetings.

Projected Costs:
System Costs:
Regional Council Costs: There will be meeting facilitation costs and administrative planning time with moving this project throughout the North Region.

B. Quality Assurance

1. North Region System Status:

How prehospital agency QI functions within the regional system for patient care evaluation of general EMS patients and for trauma patients as a subsection of EMS calls:

- Individual agency QI programs driven by MPDs to evaluate all EMS care provided.
- Problems are identified and appropriate corrective action or training is done.

Current Role of the MPD in Prehospital QA/QI:

The role and responsibilities of the five (5) MPDs in the North Region working at a local level include the following:

- Serves as patient advocate in the EMS system.
- Sets and ensures compliance with patient care standards including communication standards and dispatch and medical protocols.
- Develops and implements protocols and standing orders under which the prehospital care provider functions.
- Develops and implements the process for the provision and concurrent medical direction.
- Ensures the appropriateness of initial qualifications of prehospital personnel involved in patient care and dispatch are maintained on an ongoing basis through education, testing, and credentialing.
- Develops and implements an effective quality improvement program for continuous system and patient care improvement.

How Regional EMS and Trauma QI Program functions within the regional system for trauma care evaluation:

The North Region is mandated to have a regional quality improvement program. A state representative is present at all regional QI committee meetings and provides the region with custom Trauma Registry QI reports. The Regional Quality Improvement program is multi-disciplinary, representing prehospital, hospital and rehab providers. The Regional Council role is to provide administrative and financial support for the Regional QI Meetings, however, it is the role and responsibility of the Region's Level II and III hospitals to coordinate and facilitate Regional Quality Improvement. Any review or analysis of confidential information (patient or provider, data or case review) is discussed in the protected forum of the Regional QI program. Confidential information discussed in the Regional QI forum does not get reported out.

The North Region Quality Improvement Committee is working to create more regional QI awareness, expanding workforce knowledge of and capability in QI practices and techniques, integrating quality planning process and related QI actions into the daily operation, and fostering inter-organizational information sharing on best practices.

The North Region EMS & Trauma Care Council is working collaboratively with the Level II and Level III hospital leadership toward an improved Regional Quality Improvement (QI) Program, by providing administrative and financial support to their planning.

Currently, QI Committee consists mainly of Trauma Nurse Coordinators and has recently worked toward fostering participation with the Prehospital organizations. The Regional Council is also encouraging Prehospital agencies to participate in the Regional Quality Improvement Committee.

The QI Committee is also encouraging more physician participation by offering an educational QI forum including presentations by physician experts in trauma and Category 1 CME.

How Regional data is used for developing recommendations for system change:

Regional data is provided by the State DOH to the clinical leadership of the Regional Quality Improvement Committee. This data is generally presented by a State DOH representative during the meeting and is coordinated with the physician providing the case review. Once a QI Case Review has been conducted, the participants are encouraged go to their local agencies/facilities to address system need improvement and action plans. If there is an "operational" system issue that comes up, this information is forwarded to the appropriate committees of the Regional Council to take action.

2. Need Statement

- Improved regional Quality Improvement Program to include Prehospital agencies.
- Improved focus on Trauma Patient Transfers and Diversions
- Improved focus on Head Injuries/Focus on Rehabilitation Activation

3. EMS and Trauma System Evaluation Goals:

GOAL 1: Improved Regional Quality Improvement (QI) Program.

Objective 1 (Quarterly): North Region Prehospital agencies participate in Regional Quality Improvement forum.

Objective 2 (Quarterly): North Region office to provide administrative and financial support to the Regional Quality Improvement Committee leadership.

GOAL 2: North Region hospitals provide the best patient care for transfers and diversions.

Objective 1 (2005, 2006 and 2007): North region hospitals are encouraged to share their **Scope of Trauma Care**, as well as their specific and/or unique trauma care resources.

- ***Strategy 1:*** The regional office will compile the information provided by hospitals from their Scopes of Practice into a resource manual.

GOAL 3: North Region uses standardized Trauma Registry reports to improve Regional Performance Improvement.

Objective 1 (Quarterly): Use standardized Trauma Registry reports in the quarterly QI meetings to compare like information among facilities.

- ***Strategy 1:*** Add registry report sharing as a standing agenda item at Regional QI Committee meetings.
- ***Strategy 2****:* Continue to create and then share Data Extraction Tools via the North Region website.

VII. All Hazards Preparedness (natural, man made, & terrorism/WMD)

A. PreHospital Preparedness

1. North Region System Status:

The Regional Council has contracted with the WA DOH, Bioterrorism Preparedness Team and the Office of EMS and Trauma System to facilitate and coordinate prehospital and hospital all hazards planning. Contract deliverables include the ongoing development of a Region 1 Bioterrorism Emergency Preparedness Plan, identification of equipment and training needs, and participation in a region-wide drill/exercise. Additional expectations include the regular collaboration and coordination with other disciplines in the region.

Level of Collaboration Across Disciplines Within the Region for All Hazards Preparedness Planning and Exercises/Drills

Regional Collaboration across Disciplines: There are three regional planning entities in the North Region and throughout each region of the state that coordinate All Hazards Planning. In the North Region, these agencies are identified as follows:

- North Region EMS & Trauma Care Council (EMSTCC): *DOH/HRSA Grant Coordination.*
- Region 1 Public Health: *CDC/HRSA Grant Coordination.*
- Region 1 Homeland Security: *ODP Grant Coordination.*

Each of the three organizations has administrators that facilitate the work of regional planning. Each administrator facilitates their own agency planning needs. All three agencies are contracted with the development of a Region 1 Bioterrorism Plan, as well as the identification of equipment and training needs for their first responders. Regional administrators keep each other up to date with meeting dates and are highly encouraged to participate as often as possible.

Region 1 Table Top Exercise: The three regional planning agencies collaborate and cooperatively coordinate an annual two day seminar focusing on WMD, which includes a regional exercise with seminar participants and guests. Multi-discipline representatives are invited, including public health, pre-hospital, hospital, law enforcement, emergency management, local and state government, military and tribal nations. In 2003, there were 80 participants; in 2004, 110 participants.

The seminar provides a regional forum for participation in multidisciplinary education and awareness level training. The forum also provides strategic partners a better understanding of the roles and responsibilities of each of the disciplines in a public health emergency. Inter-local and cross-jurisdictional operational responses between multidisciplinary agencies are defined and tested in simulated events.

Seminar Courses Include:

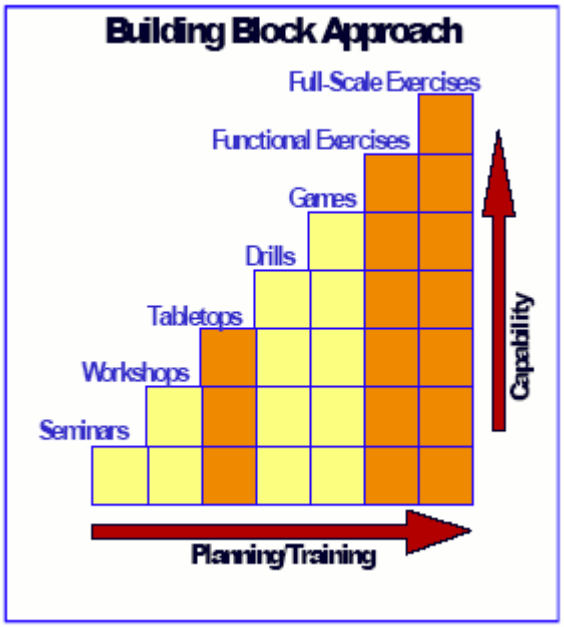
- Decon Unit Training
- ICS (Incident Command System)
- Lab Shipping and Handling
- Forensic Epidemiology
- Public Health Law
- Emerging Infectious Diseases
- Strategic National Stockpile
- Isolation and Quarantine
- Assistance Teams
- The Role of Public Mental Health in Disasters

Interoperable Communications has resulted in the appointment of two Communication Chairs, one for Prehospital Communications (a Dispatch Director) and one for Hospital Communications (a Family Practice Physician). The two chairs have regularly worked together to identify regional needs and coordinate planning efforts. Also, the Region 1 Hospital Planning Committee appointed another representative to serve as Chair for Hospital Communications Protocol Development (an Emergency Room Director). It is expected that the three chairs will regularly work together for better interoperable communication planning in the region.

The Region 1 Public Health Learning Specialist was appointed as Chair for the region's Training and Exercise Committee. This representative works closely with representatives from all three regional planning agencies and has also been working toward the development of standardized training requirements for each of the disciplines. This committee has promoted basic awareness level training, as well as many specialized training courses.

Local Drills and Exercises: Each of the five counties conducts a variety of disaster and emergency response exercises ranging from notification drills to full scale multi-jurisdictional, multi-agency exercises, most of which are coordinated by local emergency managers. These exercises are designed to train or familiarize responders, assess plans or test specific functions. These exercises are a key element in building response teams and developing coordinated disaster/emergency plans.

Region 1 Homeland Security is able to fund many of the drills in the region through the ODP grant dollars, if the drill includes a CBRNE component. Emergency Managers coordinate *local* functional and tabletop drills, as well as a few full-scale exercises, focusing on *local* threats, vulnerabilities and needs.



Current needs include the needed completion of basic awareness level WMD and ICS training for agency personnel, as well as PPE and decontamination equipment training. Awareness level training provides a structured overview of strategies for assessing, developing and applying practices, policies, procedures and planning activities to mitigate a disaster impact on a community.

Appropriate awareness level training and improved planning needs to take place before response and recovery drills can effectively occur. Local emergency managers and regional agencies need to determine the most effective and feasible type of exercises for their communities, using the principles and practices of a *progressive* exercise program; and participants need to better understand the purpose and what is being tested in the exercise.

Another challenge includes the lack of appropriate funding to execute effective *All Hazards* drills (natural, man made, and terrorism/WMD). Drills and exercises that include natural (earth quakes, floods and wild fires) and man-made (Technological: power failure, water disruption, and communication) disasters are currently not funded through the ODP grant, unless it has a CBRNE component. Emergency managers are designing drills with CBRNE components to ensure that funding will be provided to participating agencies.

Region 1 HAZMAT 'Level A' Response

County/Agency(s)	Level A	Comments
Island County		
NAS Whidbey Navel Station	**X**	Responds to the entire Whidbey Island area.
San Juan County	**X**	Contracts with Whatcom County DEM for Level A response.
Skagit County		
Skagit County DEM	**X**	Contracts with Whatcom County DEM for Level A response; also developed their own Incident Analysis Team to initiate initial response assessment. Want to augment their services with locally trained personnel to initially provide a quicker analysis of an incident.
Snohomish County		
Everett Fire Department	**X**	City of Everett has a stand-alone hazardous material team that works cooperative with the countywide group.
Fire District No. 1 Lynnwood Fire Department Edmonds Fire Department Marysville Fire Department Monroe Fire Department	**X**	These groups of city fire departments comprise another HAZMAT team that works cooperatively with the countywide team also.
The Boeing Company	**X**	Provides Level A response internally only.
Whatcom County		
Whatcom County DEM	**X**	This team provides both on-line consulting and actual response to local incidents in Whatcom and Skagit counties.

Snohomish County is also developing a new program called Advanced HAZMAT Life Support (AHLS). The core group consists of selected paramedics from the 10 ALS agencies in the County. The program includes specialized tech-level training (16 Hours) to treat patients with exposure to hazardous materials or WMD. The program also is offering other paramedics in the county operational training (5 Hours).

Currently, it would be the above Hazmat experts that would initially coordinate field decontamination, at the direction of the EOC (Emergency Operations Center).

Effective Medical Response: Effective medical responses to acts of chemical or biological terrorism involve different approach methods. The most basic of these is that terrorist incidents involving biological agents, especially infectious agents, are likely to be very different from those involving chemical agents, and thus demand very different preparation and response.

A terrorist attack with chemical agents is similar to the hazardous materials incidents that HAZMAT teams and metropolitan public safety personnel contend with regularly. A major mission of public health departments is prompt identification and suppression of infectious disease outbreaks, and poison control centers deal with poisonings from both chemical and biological sources on a daily basis. Strengthening the existing mechanisms for dealing with unintentional releases of hazardous chemicals, as well as for monitoring food safety and detecting and responding to infectious disease outbreaks, needs to continue.

Regional Council's Role in Prehospital All Hazards Planning and Activities Within the Region

The Regional Council has been involved in planning with the following:

- **Regional MCI Plan:** The region's Prehospital Committee has discussed the development of a regional MCI Plan that has the NIMS criteria. Snohomish County has taken the lead to upgrade the plan with the NIMS criteria and is expected to have it ready for committee review by mid-2005.

- **Patient Care Procedure/Burn Care Enhancement:** The region's Prehospital Committee has begun discussions on Burn Care Enhancement and the development of a Regional Patient Care Procedure for providing trauma and burn care to at least 50 severely injured adult and pediatric patients of a mass casualty incident due to terrorism. The State DOH is currently working on the development of a statewide burn care protocol. The state DOH expects the regions to develop a regional patient care procedure for Burn Care Enhancement by August 31, 2005.

- **EMS Mutual Aid Deployment Plan:** The regional office has requested updated copies of all MAAs (Mutual Aid Agreement) and MOUs (Memorandums of Understanding) in the region. Many agencies are in the process of updating these documents. The region's Prehospital Committee needs to start dialogues and planning to encourage local EMS Councils and local DEM representatives to establish an emergency response plan that ensures the capability of providing EMS triage and transportation for at least 500 adult and pediatric patients. Also required by the state is a listing of local transportation authorities and the identification of transport units (buses/vans/trailers/ambulances, etc.) available regionally to respond to a mass casualty incident at any one time. The number of patients that these units have the ability to provide triage and transportation during such an event also needs to be determined.

Prehospital WMD Equipment for WMD Preparedness

Prehospital care services require personnel, equipment, supplies, and vehicles. Additional equipment includes such items as OSHA-approved Personal Protective Equipment, Nerve Agent Antidote Kits, and contamination detection supplies. Vehicles available for transport of ambulatory victims, such as buses and trucks, need to be identified as well.

Prehospital WMD Equipment is funded by the ODP (Office of Domestic Preparedness) grant and is being planned on a local level. The Prehospital Committee needs to determine what equipment is still needed and to plan how local representatives can obtain this equipment and possible use on a regional level. More discussions and planning should take place at the regional level, providing for a more unified approach.

Prehospital WMD Awareness Training for WMD Preparedness

The Region 1 Public Health Learning Specialist was appointed as Chair for the region's Training and Exercise Committee. The chair works closely with representatives from all three regional planning agencies and has also been working with state officials toward the development of standardized training requirements for each of the disciplines. This committee has promoted basic awareness level training, as well as many specialized training courses.

Prehospital personnel must be trained and experienced in triage, treatment, and transportation functions. They must also be trained in hazardous materials to the OSHA Operations level, and in the prehospital treatment of specific medical consequences of exposure to CBRE agents. EMS personnel must also be trained in field decontamination procedures.

Many prehospital personnel have trained on awareness level WMD and MCI, however, there are still many challenges associated with additional training being promoted in the region.

There are several challenges regarding training in the region as follows:

- Integrating WMD response training into current training programs and institutions
- Integrating WMD training into existing continuing education and refresher courses
- Providing enhanced and in some cases new specialty training for specialty WMD response teams (extensions of HAZMAT)
- Providing immediate training for medical personnel beyond ongoing continuing education requirements

Any new WMD training system must make full use of the current system in place for initial training, continuing education and certification. The experience that the current system has developed is important to the success of the region's implementation of WMD training.

First responders, such as fire personnel who have not attained EMT status, may at best have had an awareness program. Some specialized police, such as SWAT teams and bomb squad, receive significant training in limited areas of HAZMAT and WMD for their own personal protection, but are not prepared to help the general public. Most rely on the local Fire Departments and prehospital services to provide the personnel for specific incidents.

Currently, individuals on the basis of personal interest acquire most HAZMAT and WMD and other specialty training requirements after they've worked in the field. The subjects are not covered in any depth in courses leading to standard certifications. As a result, few emergency medical personnel or EMTs have been exposed to the material. The cursory treatment of the rare diseases and injuries associated with WMD attacks means that the system is not particularly alert to warning signals or prepared to cope with a major incident.

Written Agreements Between Prehospital Agencies for Mutual Agency Response in Disaster for WMD Natural/Manmade Incidents

Mutual-Aid Agreements: are the means for one jurisdiction to provide resources, facilities, services, and other required support to another jurisdiction during an incident. Each jurisdiction should be party to a mutual-aid agreement with appropriate jurisdictions from which they expect to receive or to which they expect to provide assistance during an incident. This should include all neighboring or nearby jurisdictions, as well as relevant private sector and nongovernmental organizations. Mutual-aid agreements are also needed with private organizations to facilitate the timely delivery of private assistance at the appropriate jurisdictional level during incidents.

National Incident Management System: Developed by the Secretary of Homeland Security, the National Incident Management System (NIMS) integrates effective practices in emergency response into a comprehensive national framework for incident management. The NIMS will enable responders at all levels to work together more effectively and efficiently to manage domestic incidents no matter what the cause, size or complexity, including catastrophic acts of terrorism and disasters.

Implementation of the system is on a fast track; federal departments and agencies are required to make adoption of NIMS by state and local organizations a condition for federal preparedness assistance after January 2006.

Written Mutual-Aid Agreements: North Region has on file mutual-aid agreements obtained from a regional survey in 2004. Many agencies in the region are continuing to develop new mutual-aid agreements and/or upgrade their current agreements.

It is the goal of the North Region office to continue providing the NIMS guidelines for mutual-aid development in the region and also to keep copies of these agreements on file in the North Region office.

Current Interoperability Between Agencies and Across Multiple Disciplines in Multiple-Patient and Mass Casualty/Disaster Incidents for:

Equipment Resources (Compatible Care Equipment, Radios, etc)

Most of the prehospital equipment is being requested from the ODP grant, managed by Region 1 Homeland Security. Typical standardized equipment requests would include:

a. Personal Protective Equipment (PPE)
    1) Chemical Resistant Gloves
    2) Chemical/Biological Protective Undergarment
    3) Inner Gloves
    4) Chemical Resistant Outer Booties
b. CBRNE Search & Rescue Equipment
    1) Hydraulic tools; hydraulic power unit
    2) Breaking devices (including spreaders, saws and hammers)
    3) Lifting devices (including air bag systems, hydraulic rams, jacks, ropes and block and tackle)
c. Interoperable Communications Equipment
d. Decontamination Equipment (interoperable) and Supplies
e. Medical Supplies
f. Limited Types of Pharmaceuticals and Nerve Agent Antidote Kits

Funding requests from the ODP grant is being done in coordination with local emergency management agencies. In essence, planning is being done more on a countywide basis, with focus on local area needs. The actual requests are being coordinated and processed by the Region 1 Homeland Security office. Equipment is compatible as most equipment is purchased from the ODP approved equipment list.

The region would like to coordinate with emergency management and identify prehospital grant awards provided and develop a list of "WMD Equipment" in the region.

EMS Agencies Communications:
With Dispatch, Between Units and Disciplines Across the Region, and
With Receiving Hospitals for On-Line Medical Direction

EMS agencies operate under county protocols that direct agencies to make contact with the receiving hospital, except during an MCI event, which would then be directed to contact the designated medical control hospital.

WMD Patient Care Procedures/Protocols/Guidelines

Currently, there are no "specific" WMD patient care procedures/protocols/guidelines in the region. However, prehospital agencies follow a local countywide MCI Plan and medical protocols, as well as the region's patient care procedures. There are plans to adopt a regional MCI Plan in the near future (2005). Through contractual deliverables, the region is being tasked to develop a Regional Patient Care Procedure for providing trauma and burn care to at least 50 severely injured adult and pediatric patients of a mass casualty incident due to terrorism.

Other System Status Information

- Special training for prolonged care of burn-patients in an MCI event.
- NDMS (National Disaster Medical System) Patient Care Procedure for patient transport to an NDMS receiving point.

2. System Need Statement:

Existing Needs Within the Region Related to All Hazards Preparedness Including:

Preparedness Exercises of Various Types for Natural, Manmade, WMD Incidents

- Appropriate awareness level training and improved planning needs to take place before response and recovery drills can effectively occur. A calendar of drills being planned, highlighting invited agencies and what is being tested in the region, would greatly assist agencies to better prepare and plan.

- Local emergency managers and regional agencies need to determine the most effective and feasible type of exercises for their communities, using the principles and practices of a progressive exercise program; and participants need to better understand the purpose of what specifically is being tested in the exercise. Overall, agencies need enough time to appropriately plan.

- Drills need to be designed and planned to involved an All Hazards approach (natural, man made, and terrorism/WMD). To be funded by ODP grant dollars, a CBRE component needs to be tested.

- Continued focus on field decontamination and triage for chemical agent incidents and biological agent incidents.

WMD Equipment

- North Region's Prehospital Committee needs to determine what equipment is still needed in the region and formulate a plan for "regional thinking".

WMD Awareness Training

- The region needs to continue cooperation with state efforts in integrating WMD response training into current training programs and institutions.

- Prehospital personnel need specialized training for appropriate chemical and biological responses in triage, treatment and transportation functions.

- Work with state officials for more HAZMAT training for prehospital personnel.

Written All Hazards Mutual Response Agreements

- Continue to support written All Hazards Mutual Aid Response Agreements that have the eleven (11) NIMS Plan elements.

- Keep an updated list of mutual-aid agreements in the region.

Interoperability Between Agencies and Across Multiple Disciplines

- Continue to participate with the regional coordinators in Region 1 (Public Health and Homeland Security).

- Continue to assist Region 1 Public Health with annual two-day seminar, which highlights agency roles and responsibilities, equipment needs, training needs, and communication needs.

Prehospital Field Care, Equipment, and Transport for 50 burn Patients Per Million Population Per Day

- Continue to develop a Regional MCI Plan that has NIMS criteria.

- Continue discussions on Burn Care Enhancement and the development of a Regional Patient Care Procedure for providing trauma and burn care to at least 50 severely injured adult and pediatric patients of a mass casualty incident due to terrorism.

- The region's Prehospital Committee needs to start dialogues and planning to encourage local EMS Councils and local DEM representatives to establish an emergency response plan that ensures the capability of providing EMS triage and transportation for at least 500 adult and pediatric patients. Also needed is a listing of local transportation authorities and the identification of transport units (buses/vans/trailers/ambulances, etc.) available regionally to respond to a mass casualty incident at any one time. The number of patients that these units have the ability to provide triage and transportation during such an event also needs to be determined.

Communications

The region needs to determine communication flow patterns by county and intra-county communication patterns and develop written guidelines. This can only be accomplished by involving all stakeholder leaders from dispatch, prehospital, hospital, emergency management and public health.

Other System Needs

- Prehospital care of burn patients for extended periods of time during a large-scale disaster.
- NDMS (National Disaster Medical System) involvement and training regarding transport of patients.

3. Goals:

GOAL 1: North Region prehospital agencies integrate with all players involved on issues of domestic terrorism and all-hazards preparedness.

Objective 1 (Regularly): The Regional Council is regularly involved with the planning, training & exercises and evaluation of its capacity to care for sick and injured persons within the community from any cause, natural or man-made.

- ***Strategy 1:*** North Region will work with the WA DOH, EMS and Trauma System office, and the State DOH Bioterrorism Preparedness Team to facilitate and coordinate prehospital and hospital needs.

- ***Strategy 2:*** North Region will actively participate with the three regional planning committees, Region 1 Public Health Committee, Region 1 Homeland Security Council and Region 1 Hospital Emergency Preparedness Committee (NREMSTCC).

- ***Strategy 3:*** North Region will participate with other local, regional and state planning committees as required/needed.

- ***Strategy 4:*** North Region will continue to work with the Region 1 Public Health Learning Specialist and the education committee meetings at Region 1 Homeland Security Council and the North Region EMS & Trauma Care Council with planning; working toward the development of standardized training requirements, basic awareness level training, as well as other specialized training courses needed for prehospital providers.

- ***Strategy 5:*** North Region will continue to work with the Region 1 Homeland Council, Training, Exercises/Drills Sub-Committee to plan region wide drills and exercises.

- ***Strategy #5:*** North Region office will help collaborate and coordinate an annual two-day seminar focusing on WMD, to include a regional exercise with multi-disciplinary seminar participants and guests.

Objective #2 (Regularly): The Region's prehospital agencies will regularly be encouraged to participate in planning, training and exercises with public health departments, fire services, hospitals, emergency management, Native American tribes, government and military and other agencies in a collaborative and positive manner.

- ***Strategy 1:*** North Region office will keep prehospital agencies updated on training opportunities and scheduled exercises/drills to encourage a more prepared prehospital workforce.

GOAL 2: North Region prehospital providers are prepared to respond to an all-hazards incident involving at least 50 severely injured adult and pediatric patients due to a mass casualty incident.

Objective (By June 2007): North Region will work collaboratively with local, regional and state WMD planning committees to identify regional prehospital care services required for personnel, equipment, supplies, and vehicles.

- ***Strategy 1:*** North Region will develop and submit a survey to North Region prehospital providers, asking them to identify WMD equipment and supply needs (such as OSHA-approved Individual Protective Equipment, Nerve Agent Antidote Kits, and Contamination Detection Supplies, etc.). This survey will include what equipment is currently on hand, and what equipment is needed to be adequately prepared for a WMD incident.

- ***Strategy 2:*** Regional Council will work with local DEM leadership to help identify vehicles available for transport of ambulatory victims, such as buses and trucks.

Objective 2 (By June 2007): Adequate prehospital personnel will be trained and experienced in WMD triage, treatment, and transportation functions.

- ***Strategy 1:*** Regional Council will work with planning committees to insure that appropriate education and training is being provided to prehospital personnel (to provide sustained operations for extended periods of time, field decontamination procedures, etc.).

- ***Strategy 2:*** North Region will encourage prehospital agencies to complete basic awareness level WMD and ICS training, as well as PPE and decontamination equipment training as a minimum standard.

- ***Strategy 3:*** Regional Council will participate in local, regional and state drills/exercises whenever possible, including NDMS (National Disaster Medical System) drills.

- ***Strategy 4:*** North Region will work with Region 1 Homeland Security to encourage better planning to include an All Hazards approach to drills, and to ensure that these drills can be funded by the ODP grant funds.

Objective 3 (By June 2007): Adequate prehospital personnel will be trained in hazardous materials to the OSHA Operations level, and in the prehospital treatment of specific medical consequences of exposure to CBRNE agents.

Objective 4 (Ongoing): Regional Council will regularly encourage and promote the development of mutual aid agreements that include NIMS criteria, that are capable of crossing over county and regional boundaries to allow the EMS/TC system to provide coverage for at least 500 patients per day for each 1 million in population in the state.

Objective 5 (By June 2007): Regional Council has incorporated a Regional MCI Plan that has the NIMS criteria.

Objective 6 (By August 31, 2005): Regional Council has developed a Regional Patient Care Procedure for providing trauma and burn care during a mass casualty incident due to terrorism.

B. Hospital Preparedness

The Region 1 hospital planning for Bioterrorism Preparedness and Response is a comprehensive coordination of the resources of the entire community as it pertains to the prevention and mitigation and recovery in the event of bioterrorism threats to our community health. Region 1 County, Tribal and Municipal governing bodies and the Hospitals and Public Health Agencies, Emergency Management Offices, Emergency Medical Services and First Responder Services are central to the preplanning and coordination of their respective resources in dealing with a bioterrorism event. In addition to the focused mission against the threat of bioterrorism, these efforts are expected to comprehensively enhance the community health and coordination of our regional resources and promote interagency communication and cooperation and unity of purpose for the benefit of Region 1 and the State of Washington.

1. North Region System Status:

Describe the Level of Collaboration Across Disciplines Within the Region for Hospital Disaster Readiness Planning, Exercises/Drills

Level of collaboration across disciplines is much the same for hospitals as for prehospital agencies. However, the Region 1 Hospital Emergency Preparedness and Response Committee consists mainly of hospital leadership and has scheduled meetings at least once a month, inviting Prehospital, Public Health and Emergency Management to participate as often as possible. Because much of the discussions are centered around hospital equipment and training needs,

The North Region EMS & Trauma Care Council has facilitated the development of Region 1 Hospital Bioterrorism Plan and is in regular communication with those responsible for putting the Plan together. The North Region office in collaboration with Region 1 Public Health, has assisted in the planning of all group meetings, and routinely advises the group of pertinent information necessary in the preparation of the Plan.

Collaboration Among Agencies

AGENCY	COMMENTS
Local / State Emergency Management Jurisdictions	Region 1 hospitals have worked collaboratively with each of the local representatives, representing the Department of Emergency Management with the development of Regional Hospital Emergency Preparedness Planning. Once the Regional Disaster Plan is activated, the Department of Emergency Management may utilize public and private resources to aid in the response to the incident.
Metropolitan Medical Response System (MMRS)	Region 1 does not currently have a MMRS in its jurisdiction.
Between and Among Hospitals	Coordination between hospitals will be primarily managed through the regional hospital control facilities. Additional assistance may be coordinated through the medical arm of the Emergency Operating Center (EOC) having jurisdiction. A hospital representative will act as liaison to coordinate the medical response.
Native American Tribes/Councils	There are eight Native American tribes/counsels in Region 1. The North Region EMS & Trauma Care Council office staff and Regional Public Health have been involved with coordinating educational opportunities and provided information regarding Emergency Preparedness activities to tribal representatives.
Community Health Clinics	The Everett Clinic has had a strong, direct involvement in the Hospital Emergency Preparedness planning. Other Region 1 clinics have been involved via participation in educational opportunities and have been provided information regarding Emergency Preparedness activities.
Federal Health Facilities (VA, Military, etc.)	In Region 1, there are 3 federal military installations: Naval Air Station – Whidbey Island, Naval Station - Everett, and U.S. Coast Guard - Bellingham. Members of Region 1 have participated in drills and training with these and other federal health entities, including NDMS.
Local and Regional Emergency Medical Service (EMS) Councils	Members of the Region 1 Hospital Emergency Preparedness Committee participate in local and regional EMS council meetings. These representatives discuss and coordinate educational opportunities and emergency preparedness planning.
Local, County, and State Law Enforcement Agencies	Members of the Region 1 Hospital Emergency Preparedness Committee participate in local and regional Emergency Management meetings. These representatives discuss and coordinate educational opportunities and emergency preparedness planning. In addition coordination with local law enforcement agencies is included in several Hospital Emergency Preparedness Plans.

Exercises/Drills: Hospitals express frustrations at the number of exercises/drills that are randomly promoted within the region. There is confusion on what drills they must participate in to fulfill contract deliverables with community partners and which ones are in the category, “not required”.

Already, with JCAHO requirements of at least two drills a year (at least 4 months apart and no more than 8 months apart), hospitals are required to conduct exercises/drills to test their internal facility Emergency Management and Fire Plans (ICS/HEICS-Hospital Emergency Incident Command System). Now, with the collaboration across multiple disciplines, each discipline wants to test their plans and include hospital participation.

Through Region 1 Homeland Security, the three regional agencies in Region 1 are currently trying to identify all the required drills in the region and better plan exercises/drills with a process that includes a calendar and information on what contract deliverable is being fulfilled, who are the planning agencies, what agencies are invited to participate, as well as clearly identifying the purpose of the exercise/drill and what is being tested.

Three-Year Exercise Planning: A Three-Year Exercise Plan developed, as a first step planning process would serve as the initial planning document of progressive exercise/drill development. A Three-Year Planning document would serve to develop objectives to support an exercise methodology and to ultimately define inter-regional or state-level exercises. Continued educational workshops should also continue.

This process would actually force agencies to address the exercise needs of each jurisdiction and designated agencies/organization. The exercises identified in the plan would complement existing plans, equipment, resource allocations, and training needs. ODP-sponsored exercises will provide an opportunity to evaluate community preparedness levels and identify opportunities for improvement.

Developing a Three-Year Exercise Plan would provide the opportunity to not only include the required WMD-issues, but also give planners an opportunity to include All Hazards planning. ODP-sponsored drills must satisfy requirement of the Federal Emergency Management Agency (FEMA), the hospital certification agency and other required agencies.

Exercises will need to be designed and scheduled following the building-block approach, with each exercise increasing in scope, scale, and complexity. Because each jurisdiction will differ with respect to threat level and capabilities, each jurisdiction will have its own starting point in the three-year cycle.

National Disaster Medical System (NDMS): The National Disaster Medical System (NDMS) is a section within the U.S. Department of Homeland Security, Federal Emergency Management Agency, Response Division, Operations Branch, and has the responsibility for managing and coordinating the Federal medical response to major emergencies and federally declared disasters including:

- Natural Disasters
- Technological Disasters
- Major Transportation Accidents
- Acts of Terrorism including Weapons of Mass Destruction Events

Working in partnership with the Departments of Health and Human Services (HHS), Defense (DoD), and Veterans Affairs (VA), the NDMS Section serves as the lead Federal agency for medical response under the National Response Plan.

NDMS is a nation-wide partnership embracing communities with world-class medical and emotional care in the wake of a natural or manmade disaster. The mission of the National Disaster Medical System is to design, develop, and maintain a national capability to deliver quality medical care to the victims of - and responders to - a domestic disaster. NDMS provides state of the art medical care under any conditions at a disaster site, in transit from the impacted area, and into participating definitive care facilities.

Components of the National Disaster Medical System include:

- Medical response to a disaster area in the form of teams, supplies, and equipment
- Patient movement from a disaster site to unaffected areas of the nation
- Definitive medical care at participating hospitals in unaffected areas

NDMS Training Exercises: North Region hospitals have participated in drills on several occasions with local NDMS leadership and need to continue the development of this important relationship.

Washington and Oregon Disaster Medical Assistance Teams: Disaster Medical Assistance Teams (D-MAT) Teams provide a statewide team of healthcare professionals who are committed to preparedness and response to provide relief medical care in the event of a disaster or public health emergency in Washington, Oregon, the Pacific Northwest or wherever a federal disaster is declared throughout the United States or abroad.

Regional Council's Role in Hospital All Hazards Planning and Activities Within the Region

Through a HRSA Grant, DOH contracts with North Region EMS & Trauma Care Council to fulfill deliverables that address the following:

- **Hospital Equipment Needs:** The North Region office facilitates meetings among hospital leadership to provide an ongoing assessment of Region 1 WMD hospital equipment and training needs. Based on the amount of funds allocated from DOH through the HRSA grant, the Region 1 Hospital Emergency Preparedness Committee provides an annual Funding Needs List and prioritizes these needs. Categories include interoperable communication needs (1st priority), training, and drill/exercises needs (2nd priority), basic standardized equipment needs (3rd priority), security needs, capitol improvements, lab enhancements, etc. With an excel document tool, the regional office tracks what each hospital will be receiving through the HRSA grant funds, as well what has been invoiced by Washington State Hospitals Association, the agency purchasing the hospital equipment, etc. Although this is not a deliverable from the state contract, the committee found it necessary to track the equipment to get a better sense of where we were with spending and to quickly assess priorities when additional funding came available due to equipment costing less than originally expected, etc.

- **Facilitation of Meetings:** The North Region office plans and facilitates monthly meetings, chaired by a committee member. The meetings are scheduled for approximately six hours each month, consisting mainly of hospital leadership. In these meetings, the regional office presents a standardized agenda that covers ongoing projects of the committee. The regional office also provides packets of ongoing pertinent planning information that comes through the regional office. This alone is a daunting task.

- **Hospital-Based Negative-Pressure Isolation Capacity Inventory Survey:** The North Region office coordinated a Region 1 survey of hospital-based negative-pressure isolation capacity inventory. This survey was forwarded to the Regional Emergency Response Coordination (RERC).

- **Quarterly Reporting:** The North Region submits quarterly reports of Region 1 planning activities, including the number of meetings, attendance, and any changes to the Region 1 Hospital Emergency Response Plan.

- **Burn Care Capacity Enhancement:** The North Region office submits quarterly progress reports on the Statewide Trauma and Burn Care Capacity Enhancement to DOH, including the identification of agencies involved in developing capabilities to meet the objective. Also reported on is the status of completing a Patient Care Procedure (PCP) for providing trauma and burn care to at least 50 severely injured adult and pediatric patients due to a mass casualty incident due to terrorism.

- **Regional Exercise & Training:** The North Region office keeps track of dates, attendees and outcomes of meetings with EMS agency and hospital involvement, discussing participation in local, regional or statewide emergency preparedness and response exercises and training.

Describe the Status of the Regional Hospital Plan:
Preparedness and Response for Bioterrorism

The Region 1 Hospital Emergency Preparedness and Response Plan was submitted to state DOH in 2004. The Region 1 Hospital Planning Committee plans to continue participating at least annually to review the scope, objectives, performance, and effectiveness of the Plan. In addition to the review, if deficiencies or additional response needs are identified by the hospitals, or other agencies affected by the Plan, recommendations for change will be made.

Status of Completion of Hospital WMD Awareness Training

HRSA Funds for Training: Currently, the Region 1 Hospital Emergency Preparedness Committee has budgeted $15,000 for larger hospital facilities and $7,000 for smaller hospitals to provide WMD Awareness Level Training for key hospital leadership. In previous years, funds for training have been prioritized and will continue to be prioritized in future funding years.

There is a need to develop a system to rapidly credential, ensure competencies, and effectively utilize healthcare providers in a disaster.

Annual WMD Seminar: Through the annual WMD Seminar, which is funded and planned by the three Region 1 planning committees (Public Health, Homeland Security, EMS & TC Council), basic education and awareness level training is offered in a single day forum to efficiently update key strategic partners. This seminar has presented an opportunity for health personnel, public health and hospitals, to train together on overlapping core classes identified by each group, such as Incident Management Systems, WMD Awareness, or other planning and capacity issues. By training together and providing a forum to better understand each discipline's respective role in a public health emergency, we have started to create the foundation for a more organized and collaborative response.

Currently, online training is available from:

- WA DOH is developing online training.
- FEMA also offers online training.
- WPHTN (Public Health Training Network) offers online training, which will be administered by the Regional Learning Specialist.

Status of Hospital WMD Readiness Equipment (ex. PPE, Decontamination, etc)

The State DOH, Bioterrorism and Preparedness Team, has developed Phase I – IV for distribution of PPE equipment and Decontamination equipment for all hospitals in the state. Almost all hospitals in Region 1 all have PPE and decontamination equipment, as well as standardized WMD readiness equipment.

2. System Need Statement Related to Hospital Preparedness:

The Development and Implementation of the Regional Hospital Plan:
Preparedness and Response for Bioterrorism

- The Regional Council needs to continue their collaboration and integration with all disciplines on issues regarding domestic terrorism and all-hazards preparedness planning.

- The Regional Council needs to regularly participate in the three regional planning committees in the North Region, Region 1 Public Health, Region 1 Homeland Security

Council and the Training and Exercise/Drills Sub-Committee, and the Region 1 Hospital Emergency Preparedness Committee (facilitated by North Region EMS & Trauma Care Council).

- The Region Hospital Emergency Preparedness Plans needs to be updated on an annual basis, reviewing the scope, objectives, performance and effectiveness of the Plan.

- The Region 1 Hospital Emergency Preparedness Committee needs to drill different sections of the plan on an annual basis to identify gaps in planning.

Awareness Level Training of Hospital Personnel

- Standardized training requirements need to be developed for hospital personnel.

- Sufficient Hospital personnel must be trained and experienced decontamination, triage, treatment, and personal protection.

- Many hospital personnel have trained on awareness level WMD and MCI, however, there are still many challenges associated with keeping track of what is sufficient training.

Equipment (PPE, Decontamination, etc,)

- **Ventilators:** Assessing the total amount of ventilators in Region 1 is an important measure to estimate, particularly since many potential bioterrorist agents can affect the respiratory system. It is important to note that many hospitals rent ventilator equipment and during a surge, hospitals may be competing for this resource.

- **Personal Protective Equipment (PPE):** The Occupational Safety and Health Administration (OSHA) requires the use of PPE to reduce employees' exposures to hazards in the health care workplace environment. Issues surrounding use of PPE are particularly relevant when examining readiness to respond to a bioterrorist or chemical event. PPE necessary for bioterrorist response includes face shields, safety glasses, gloves, masks, respirators, and protective suits; these come in many different variations of durability, cost, and ease of usability. There is still debate surrounding the establishment of guidelines for appropriate PPE for the different bioterrorist and chemical agents. The most basic form of PPE: N95 disposable masks and positive air purification respirators (PAPRs).

Drills/Exercises

- Identification of all required drills in the region is needed, as well as what contract deliverables are being fulfilled by the drill.

- Better planning of exercises/drills with a process that includes an annual calendar. The Three-Year Exercise Plan developed by local DEM agencies needs to include the North Region EMS & Trauma Care Council in their planning.

- Also needed, is a summary of who the planning agencies are, what agencies are invited to participate, as well as a clearly identified purpose of the exercise/drill and what is being tested.

- After Action Reports need to be submitted to planning agencies, including the North Region EMS & Trauma Care Council.

- Hospital facilities need to better understand the process to activate the National Disaster Medical Systems (NDMS) program as well as continue to participate in drills facilitated by NDMS leadership and the Washington State Hospital Association (WSHA).

Burn Care for 50 Patients Per Million-Population Per Day

- North Region EMS & Trauma Care Council and Region 1 planning committees need to continue to work collaboratively with DOH and WSHA to assist with the enhancement of a statewide trauma and burn care capacity to be able to respond to a mass casualty incident due to terrorism. This plan should ensure the capability of providing trauma care to at least 50 severely injured adult and pediatric patients per million of population.

- Plans should also include provisions for the triage of less critically ill patients and the intra or inter-regional diversion and transport of less critical surgical patients to other facilities. Transport across State lines may also be necessary in some jurisdictions. All plans should consider a timeframe of up to 12 hours for triage, transport and admission to a specialty bed. Resources may include, but are not limited to, metropolitan medical response systems, disaster medical assistance teams, and mobile surgical response teams.

Other System Needs:

Hospital Bed Capacity Website – Harborview Medical Center

- Region 1 Hospital facilities need to regularly update the Hospital Bed Capacity website developed by Harborview Medical Center.

Critical Benchmark #2-1: Surge Capacity: Beds

- The North Region EMS & Trauma Care Council need to with the Region 1 committees to assist in establishing a system that allows the triage, treatment and initial stabilization of 500 adult and pediatric patients per 1,000,000 population, above the current daily staffed bed capacity, with acute illnesses or trauma requiring hospitalization from a chemical, biological, radiological, nuclear or explosive (CBRN&E) incident.

- The region needs to use the ratio in the HRSA benchmark to determine the number of adults and pediatrics to plan for based on the percentage each of those populations represented in the region as a whole. The region's population is approximately 1 million, so in essence the region needs to prepare for an additional 500 adult and pediatric patients, above the current daily-staffed bed capacity.

- The region needs to assist in providing a framework for developing a unified comprehensive system of response that meets the needs of a state, city or local community, to provide the most good for the greatest number of people while using limited resources and integrates easily into the Federal Response Plan. The overarching objective is to establish the level of surge capacity, which realistically can be achieved, using available resources to provide a caring and safe environment for victims of a mass casualty event.

- North Region preparedness planning must also address not only enhancing the surge capacity of individual health care facilities, but also establishing mutual aid agreements among them.

- The Region must consider and include off-site options for increasing bed capacity such as mobile facilities, temporary facilities appropriate to an austere environment, large convention halls, armories, and State fair grounds. Additionally, the plan must account for the operational and physical needs of special populations; notably people with physical disabilities, geriatrics, and the mentally ill to the extent possible.

Critical Benchmark #2-2: Surge Capacity: Isolation Capacity

- North Region EMS & Trauma Care Council needs to work with the Region 1 committees to ensure that all hospitals in the region have the capacity to maintain, in negative pressure isolation, at least one suspected case of a highly infectious disease (e.g., small pox, pneumonic plague, SARS, Influenza and hemorrhagic fevers) or for any febrile patient with a suspect rash or other symptoms of concern who might possibly be developing a potentially highly communicable disease.

- In addition, the North Region needs to identify one regional healthcare facility that is able to support the initial evaluation and treatment of at least 10 adult and pediatric patients at a time in negative pressure isolation. Ideally, the negative pressure isolation room should be placed in or adjacent to the Emergency Department, if one is available. This capacity does not have to be a permanent infrastructure upgrade and can involve temporary or portable systems. These upgrades must be in compliance with all local, state and federal laws, statutes and regulations governing negative pressure isolation rooms.

Critical Benchmark #2-3: Surge Capacity: Health Care Personnel

- North Region EMS & Trauma Care Council and its Region 1 committees need to continue to review and establish a response system that allows the immediate deployment of additional health care personnel in support of surge bed capacity noted in Critical Benchmark # 2-1. The number of health care personnel needs to be linked to already established patient care ratios on 24 hours operations.

- A description of how these personnel are recruited, received, processed and managed through the incident needs to be more clearly identified.

- Local hospitals need to negotiate mutual aid agreements that specify where additional staff is obtained while awaiting the arrival of other local, state and Federal resources.

Critical Benchmark #2-4: Surge Capacity: Advance Registration System

- North Region EMS & Trauma Care Council to assist with the planning and develop a system that allows for the advance registration and credentialing of clinicians needed to augment a hospital or other medical facility to meet patient/victim care increased surge capacity needs.

- One approach to enhancing the availability of health care personnel is to include provisions for accepting the credentials maintained by other accredited health care facilities during an emergency into facility Emergency Operation Plans and mutual aid agreements.

Critical Benchmark #2-5: Surge Capacity: Pharmaceutical Caches

- North Region EMS & Trauma Care Council in collaboration with other Region 1 planning committees need to establish regional plans that insure a sufficient supply of pharmaceuticals to provide prophylaxis for 3 days to hospital personnel (medical and

ancillary staff), emergency first responders and their families as well as for the general community -- in the wake of a terrorist-induced outbreak of anthrax or other disease for which such countermeasures are appropriate.

Critical Benchmark #2-6: Surge Capacity: Personal Protective Equipment

- Region 1 hospital facilities need to ensure adequate personal protective equipment (PPE) to protect current and additional health care personnel, during a chemical, biological, radiological or nuclear incident. This benchmark is tied directly to number of health care personnel Region 1 must provide to support surge capacity for beds.

Critical Benchmark #2-7: Surge Capacity: Decontamination

- North Region EMS & Trauma Care Council and Region 1 committees need to collaboratively ensure that adequate portable or fixed decontamination systems exist for managing adult & pediatric patients, as well as health care personnel, who have been exposed during a chemical, biological, radiological, nuclear or explosive incident.

- Equipment purchased with HRSA funding needs to be interoperable with equipment purchased with funds from the State Homeland Security Grant Program for first responders.
- Minimum Level of Readiness:
    - Hospital facilities need to possess sufficient numbers of PPE to protect both the current and additional health care personnel expected to be deployed in support of a Bio-terrorism event.
    - Hospital facilities need to possess contingency plans to establish sufficient numbers of PPE to protect both the current and additional health care personnel expected to be deployed in support of a chemical and radiological event.
    - Hospital facilities need to posses sufficient numbers of fixed and/or portable decontamination facilities for managing adult and pediatric victims as well as health care personnel, who have been exposed during a chemical, radiological, nuclear or biological incident.

Critical Benchmark #2-8: Surge Capacity: Behavioral (Psychosocial) Health

- North Region EMS and Trauma Care Council and Region 1 committees need to collaboratively plan to enhance the networking capacity and training of health care professionals to be able to recognize, treat and coordinate care related to the behavioral health consequences of bioterrorism or other public health emergencies.

- Region 1 facilities need to develop behavioral health components of hospital preparedness plans that are integrated with other existing emergency behavioral health plans developed by the State behavioral health authority. These plans should include the following issues:

    - Behavioral health issues related to quarantine
    - Behavioral health issues related to evacuation
    - Addressing anxiety among patients and families
    - Addressing need of patients with medically unexplained physical symptoms
    - Family support in hospital settings
    - Death notification
    - Risk communication in coordination with public health authorities to educate the public on potential risks and whether they should report to hospitals

- Region 1 Hospital facilities need to work with existing Behavioral Health Preparedness networks, task forces and workgroups already underway through the state behavioral

health authority. These groups can provide information that will increase basic competence in responding to the behavioral health needs of adults, pediatrics and health care personnel.

Critical Benchmark #2-9: Surge Capacity: Trauma and Burn Care

- North Region EMS & Trauma Care Council and Region 1 planning committees need to work collaboratively with DOH and WSHA to assist with the enhancement of a statewide trauma and burn care capacity to be able to respond to a mass casualty incident due to terrorism. This plan should ensure the capability of providing trauma care to at least 50 severely injured adult and pediatric patients per million of population.

- Plans should also include provisions for the triage of less critically ill patients and the intra or inter-regional diversion and transport of less critical surgical patients to other facilities. Transport across State lines may also be necessary in some jurisdictions. All plans should consider a timeframe of up to 12 hours for triage, transport and admission to a specialty bed. Resources may include, but are not limited to, metropolitan medical response systems, disaster medical assistance teams, and mobile surgical response teams.

Critical Benchmark #2-10: Surge Capacity: Communications and Information Technology

- North Region EMS & Trauma Care Council needs to work with the Region 1 committees to continue their working is establish a secure and redundant communications system that ensures connectivity during a terrorist incident or other public health emergency between health care facilities and state and local health departments, emergency medical services, emergency management agencies, public safety agencies, neighboring jurisdictions and federal public health officials.

- The Regional Council needs to demonstrate interoperability with communication equipment purchased with HRSA funds.

- The Regional Council needs to have a secure and redundant communications system that allows connectivity among all agencies and healthcare entities responding to a terrorist event or other public health emergency.

- The Regional Council needs to continue to be involved with ongoing information technology activities in use across the region and state to include Internet connectivity, e-mail notifications of alerts and other critical communications.

- The Regional Council needs to continue to assist in planning for back up systems in the event main communications mechanism and systems fail.

- The Regional Council needs to regularly update and compile a summary of all current communications capabilities in hospitals, clinics, and EMS systems and poison control centers. This summary needs to include the ability of the statewide communication system to respond to overloading of standard telephone, cellular phone and radio communications during a terrorist incident.

Critical Benchmark #4-2: Surveillance

- North Region EMS & Trauma Care Council and Region 1 planning committees need to collaboratively work to enhance the capability of rural and urban hospitals, clinics, emergency medical services systems and poison control centers to report syndromic and

diagnostic data that is suggestive of terrorism to their associated local and state health departments on a 24-hour-a-day, 7-day-a-week basis.

Critical Benchmark #5: Education and Preparedness Training

- North Region EMS & Trauma Care Council and Region 1 committees need to collaboratively utilize competency based education and training programs for adult and pediatric pre-hospital, hospital, and outpatient health care personnel responding to a terrorist incident.

- The Regional planning committees need to first and foremost, through their education and evaluation systems, ensure that the health care workforce is able to:

Locate and use the section of the hospital emergency response plan that applies to their position:

1. Describe their emergency response role and be able to demonstrate it during drills or actual emergencies;

2. Demonstrate the use of any equipment (such as personal protective equipment or special communication equipment) required by each emergency response role;

3. Describe their responsibility for communicating with or referring requests for information from other employees, patients and families, media, general public, or their own families and demonstrate these responsibilities during drills or actual emergencies;

4. Demonstrate the ability to seek assistance through the chain of command during emergency situations or drills;

5. Demonstrate the ability to solve problems that arise carrying out their role during emergency situations or drills.

- When hospital and health system staff has demonstrated the aforementioned abilities, hospitals can proceed to train their staff in subject matters directly related to mass casualty incidents caused by radiological, explosive, chemical or biological agents.

These might include:
1. Illness and disease management for healthcare professionals
2. Event Recognition
3. Triage
4. Transportation
5. Decontamination
6. Psychological Effect
7. Fatality Management

Critical Benchmark #6: Terrorism Preparedness Exercises

- Exercises/drills should cover a large-scale scenario affecting adults and children. Hospitals, clinics, community health centers, poison control centers, emergency medical services, state and hospital laboratories, and local/county public health departments must be involved and play a crucial role in the exercise. Rural and urban areas should be included in the exercises/drills; ideally an entire jurisdiction should participate.

- Coordination among Federal, state and local/county agencies is vital when planning and conducting exercises and drills. Region 1 agencies are encouraged to plan and when possible explore joint funding of exercises and drills with partners such as grantees of the Department of Homeland Security or other entities at the state and/or Federal level and other agencies.

- Exercises/drills must be of sufficient intensity to challenge management and response operations.

- The intensity of the exercise should test the plan for hospitals surge capacity (staff, beds, equipment) as well as alternative sites for patient care. The needs of special populations listed in the application must be addressed in the exercise. The exercises and drills should have components built into them to test risk communications plans.

- Behavioral health is a crucial element in any bioterrorism exercise/drill. Acute psychosocial interventions and psycho-educational briefings should be skillfully incorporated in the exercise scenario and behavioral health professionals for adults and children should be included in those personnel participating in the exercise.

- Exercise planning must conduct terrorism preparedness exercises/drills that:
    - Contain elements addressing the needs of special populations
    - Emphasize a regional approach
    - Are coordinated with other state, local and Federal drills and exercises to maximize resources.

The North Region EMS & Trauma Care Council needs to encourage from all agencies to provide:

1. A list of regional exercises/drills needs to be organized, with a brief one- or two-sentence description.
2. After-action reports need to be submitted that detail:
    - The date, location, personnel, participating agencies and funding source for the exercise (state, local, federal or a combination of all three)
    - How the needs of special populations were incorporated into the drills and will be incorporated into future drills and exercises
    - That all health care workforce practiced and understood their roles, and
    - Lessons learned and how those will be applied to future exercises and drills and incorporated into response plan updates.

3. Goals:

GOAL #1: Region 1 hospital facilities and clinics have integrated with all players involved on issues of domestic terrorism and all-hazards preparedness.

Objective #1 (Regularly): The Regional Council is regularly involved with the planning, training & exercises and evaluation of its capacity to care for sick and injured persons within the community from any cause, natural or man-made.

- ***Strategy #1:*** North Region will work with the WA DOH, EMS and Trauma System office, and the State DOH Bioterrorism Preparedness Team to facilitate and coordinate prehospital and hospital needs.

- ***Strategy #2:*** North Region will actively participate with the three regional planning committees, Region 1 Public Health Committee, Region 1 Homeland Security Council and Region 1 Hospital Emergency Preparedness Committee (NREMSTCC).

- ***Strategy #3:*** North Region will participate with other local, regional and state planning committees as required/needed.

- ***Strategy #4:*** North Region will continue to work with the Region 1 Public Health Learning Specialist and the education committee meetings at Region 1 Homeland Security Council and the North Region EMS & Trauma Care Council with planning; working toward the development of standardized training requirements, basic awareness level training, as well as other specialized training courses needed for prehospital providers.

- ***Strategy #5:*** North Region will continue to work with the Region 1 Homeland Council, Training, Exercises/Drills Sub-Committee to plan region wide drills and exercises.

- ***Strategy #5:*** North Region office will help collaborate and coordinate an annual two-day seminar focusing on WMD, to include a regional exercise with multi-disciplinary seminar participants and guests.

GOAL #2: Region 1 Bioterrorism Emergency Preparedness Plan updated.

Objective (Annually): The Region 1 Hospital EPR committee will review the sections of the Region 1 Bioterrorism Plan and update annually in conjunction with the HRSA Benchmarks Guidance.

GOAL #3: Region 1 Hospital EPR Committee works collaboratively with DOH HRSA contract deliverables.

Objective (Regularly): North Region office to facilitate regular meetings to achieve contract deliverables.

Appendices

Appendix 1: - North Region Equipment Needs/Requests

ISLAND COUNTY

AGENCY	EQUIPMENT REQUESTED	COST OF EQUIPMENT
Island County FD #1	ECS Emergency Care Simulator Base Unit	$94,852.00
		$94,852.00

SAN JUAN COUNTY

AGENCY	EQUIPMENT REQUESTED	COST OF EQUIPMENT
San Juan EMS	6 Portable Radios	$5,720
San Juan EMS County Wide	Interoperability Communications system towers	$20,000.00
San Juan EMS	Lap Top Computer	$1,800.00
San Juan EMS	Torso Model	$170.00
San Juan EMS	Moulage Kit	$450.00
Orcas Island Fire/EMS Department	2 AED Trainers	$900.00
Lopez Fire/EMS Department	Power Point Projectors	$2,000.00
Lopez Fire/EMS Department	Mannequin - Mega Code	$7,500.00
Shaw Fire/EMS Department	2 AED Trainers	$900.00
	Island County TOTAL	***$39,440.00***

SKAGIT COUNTY

AGENCY	EQUIPMENT REQUESTED	COST OF EQUIPMENT
Skagit County EMS Commission	Laptop Computer, Power Point projector	$3,000.00
Skagit County EMS Commission	Sim-Baby ALS/BLS Training	$35,000.00
	Skagit County TOTAL	***$38,000.00***

SNOHOMISH COUNTY

AGENCY	EQUIPMENT REQUESTED	COST OF EQUIPMENT
Snohomish Co. Airport Fire	Power Point Projectors	$1,200.00
Snohomish Co. Airport Fire	Full body CPR/Trauma Manikin	$945.00
Snohomish Co. Airport Fire	Defib/CPR Trainer Manikin	$1,150.00
Snohomish Co. Airport Fire	AED Trainer and Pads	$345.00
Snohomish FPD #7	Airway Management Trainer	$92.00
Snohomish FPD #7	OB Manikin	$495.00
Snohomish FPD #7	Power Point Projectors	$1,200.00
Snohomish FPD #7	Arrhythmia Simulator	$860.00
Snohomish FPD #5	OB Manikin	$495.00
Snohomish FPD #5	Airway management Trainer	$925.00
Snohomish FPD #5	IV Training Arm	$435.00
Snohomish FPD #5	full Body CPR/Trauma Manikin	$945.00
Arlington Fire	Laptop Computer	$1,500.00
Arlington Fire	Airway Management Trainer	$925.00
Arlington Fire	Power Point Projector	$1,200.00
Arlington Fire	Trauma manikin With Intubation Head	$2,474.00
Snohomish FPD #27	2 each CPR Manikin	$760.00
Edmonds Fire Department	1 SimMan	$26,490.00
Lynnwood Fire Department	1 SimMan	$26,490.00
	Snohomish County TOTAL	***$68,926.00***

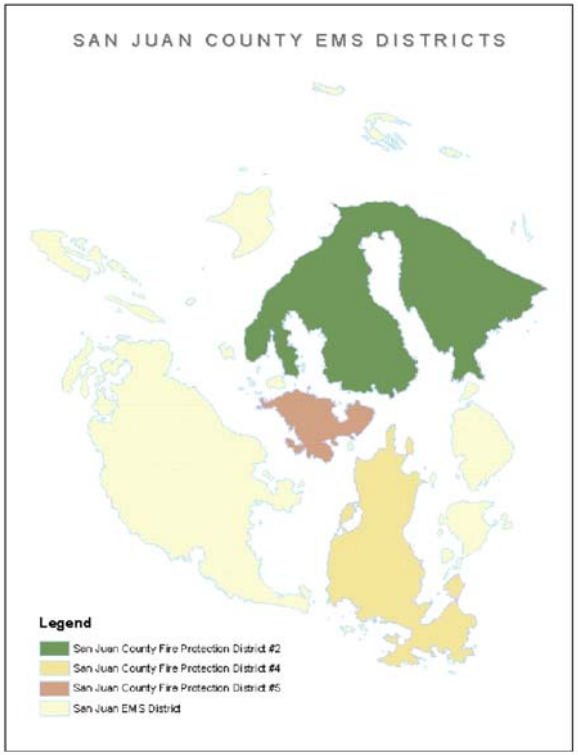
WHATCOM COUNTY

AGENCY	EQUIPMENT REQUESTED	COST OF EQUIPMENT
Whatcom FD #14	Laptop Computer	$1,500.00
Whatcom FD #11	Laptop Computer	$1,500.00
Whatcom FD #11	Power Point Projector	$1,500.00
Whatcom FD #11	Screen	$200.00
Whatcom FD #16	Laptop Computer	$1,500.00
Whatcom FD #16	Power Point Projector	$1,500.00
Bellingham Tech College	SimBaby	$12,000.00
Whatcom FD #17	CPR Manikin	$400.00
Whatcom FD #17	Combi-tube Manikin	$1,250.00
Whatcom FD #17	Extra Combi-tubes	$100.00
Whatcom FD #7	Adult Airway management Trainer Torso	$925.00
Whatcom FD #7	Vital Signs Monitor with NIBP & Nellcor Pulse Oximetry	$2,550.00
Whatcom FD #5	CPR Adult/Child ACTAR manikins (10)	$7,950.00
Whatcom FD #5	CPR Infant ACTAR Manikins (10)	$5,450.00
Whatcom FD #5	AED ACTAR Manikins (5)	$1,925.00
Whatcom FD #5	Zoll AED Training Unit	$350.00
Whatcom FD #4	Airway Bag	$200.00
Whatcom FD #4	Oxygen/regulator	$150.00
Whatcom FD #4	MTV/hose	$350.00
Whatcom FD #4	Pulse-Ox	$550.00
Whatcom FD #4	Glucometer	$60.00
Whatcom FD #4	Thermometer	$65.00
Whatcom FD #4	OB Manikin	$500.00
Whatcom FD #4	Simulaids "Choking Manikin" - Adult	$225.00
Whatcom FD #4	Simulaids "Choking manikin" - Child	$130.00
Whatcom FD #4	Simulaids "Choking Manikin" - Ped.	$130.00
Whatcom FD #4	Crash Kelly full body manikin	$876.00
Whatcom FD #4	4 Backboards	$560.00
Whatcom FD #4	4 BP cuffs	$40.00
Whatcom FD #4	4 stethoscopes	$60.00
Whatcom FD #4	Disposable airway training adjuncts	$250.00
Whatcom FD #4	Disposable splitting/dressings	$150.00
Whatcom FD #4	Disposable spinal care items	$200.00
Whatcom FD #4	Full set vacuum splints	$650.00
Whatcom FD #4	S-cort 10 suction unit	$1,000.00
	Whatcom County TOTAL	***$46,746.00***

Appendix 2: - North Region Current Response Maps

San Juan County
VERIFIED EMS PROVIDERS

Verified Aid Vehicle - BLS	Verified Ambulance - ALS	Verified Ambulance - BLS
--Shaw Island Fire District 5, Shaw Island	--San Juan County Fire District #2, East Sound, Orcas Island --San Juan Island EMS, Friday Harbor, San Juan Island	--San Juan County Fire District #4, Lopez Island

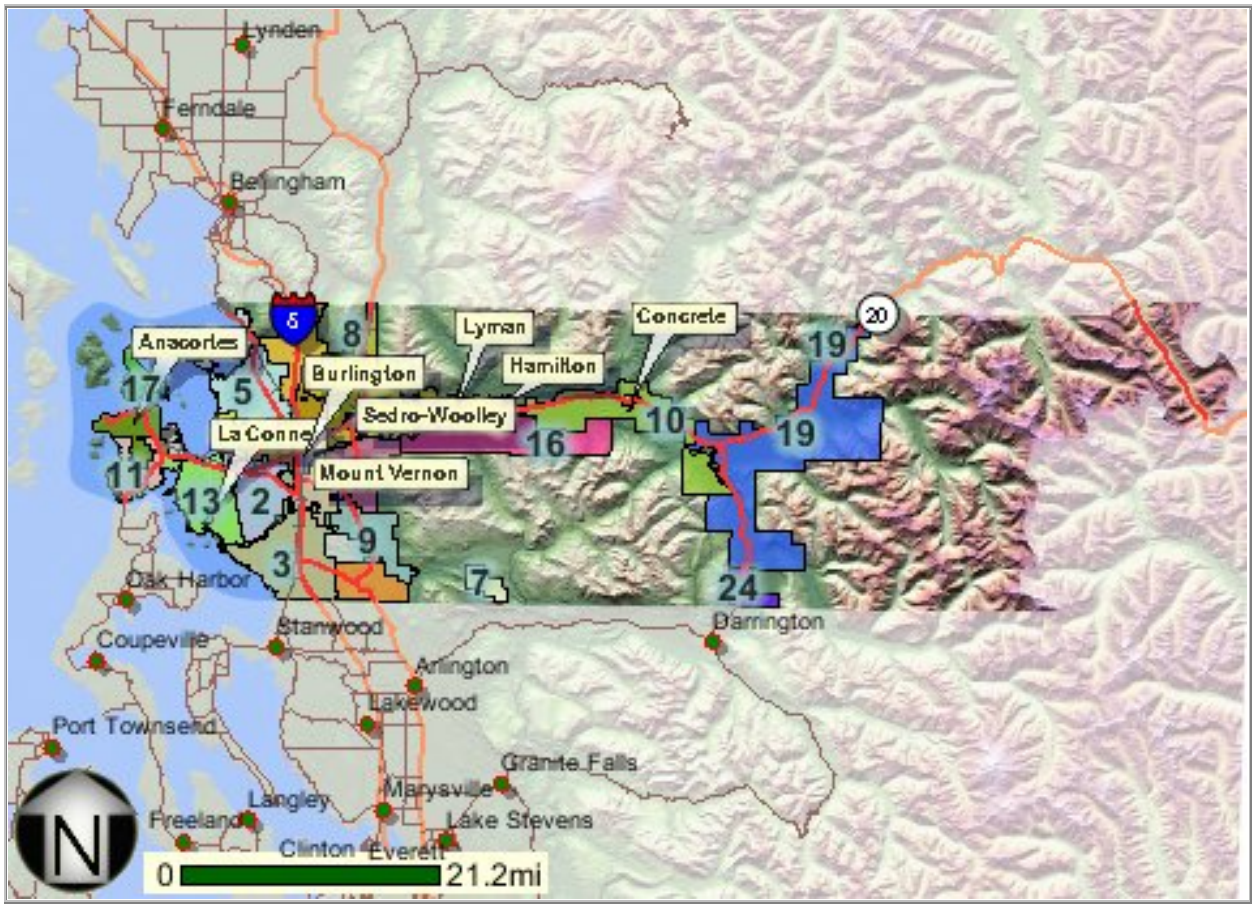


Island County
VERIFIED EMS PROVIDERS

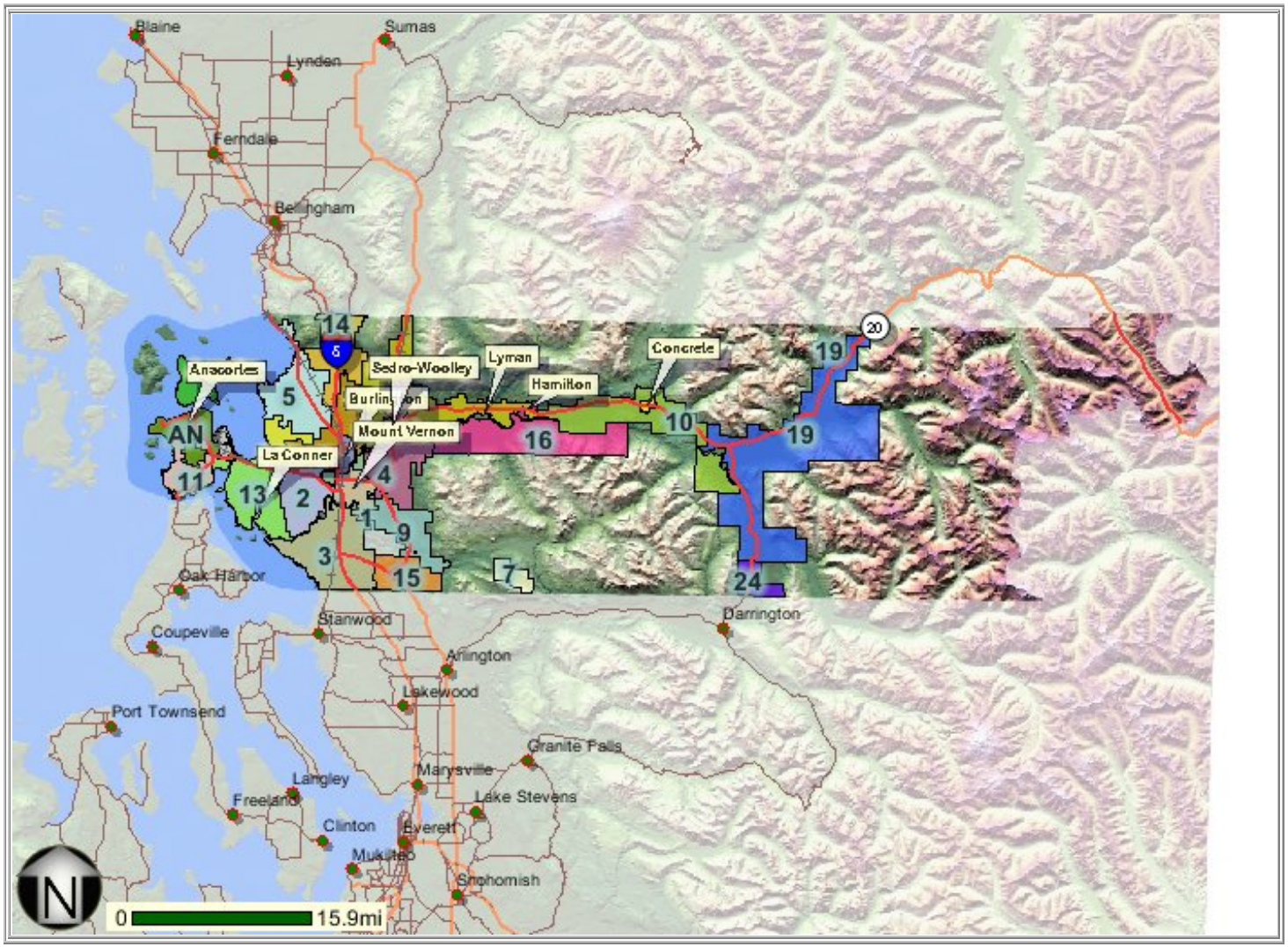
Verified Aid Vehicle - BLS	Verified Ambulance - ALS	Verified Ambulance - BLS
--Island County FPD#2, Oak Harbor --Island County FPD#3, Langley --Central Whidbey Island Fire & Rescue, Coupeville --Oak Harbor Fire Department, Oak Harbor	--Whidbey General Hospital Ambulance, Coupeville	--Island County Fire & Rescue, Camano Island --Navel Hospital Oak Harbor EMS, Oak Harbor

Skagit County
VERIFIED EMS PROVIDERS

Verified Aid Vehicle - BLS	Verified Aid – BLS Cont'd	Verified Ambulance – ALS
--Skagit County Fire District # 1, Mount Vernon	---Skagit County Fire District #14, Burlington	--Anacortes Fire Department, Anacortes
--Skagit County Fire District #2, Mount Vernon	--Skagit County Fire District #15, Mount Vernon	--Aero-Skagit Emergency, Concrete
--Skagit County Fire District #4, Clear Lake	--Skagit County Fire District #16, Sedro Woolley	--Skagit County Medic One, Mount Vernon
--Skagit County Fire District #5, Bow	--Skagit County Fire District #17, Anacortes	
--Skagit County Fire District #7, Mount Vernon	--Skagit County Fire District #19, Rockport	**Verified Ambulance – BLS**
--Skagit County Fire District #8, Sedro Woolley	--Hamilton Fire Department, Hamilton	--Island Hospital
--Skagit County Fire District #9, Clear Lake	--La Conner Fire Department, La Conner	
--Mount Erie Fire Department, Anacortes	--Mount Vernon Fire Department, Mount Vernon	
--Skagit County Fire District #12, Mount Vernon	--Sedro Woolley Fire Department, Sedro Woolley	
--Skagit County Fire District #13, La Conner		



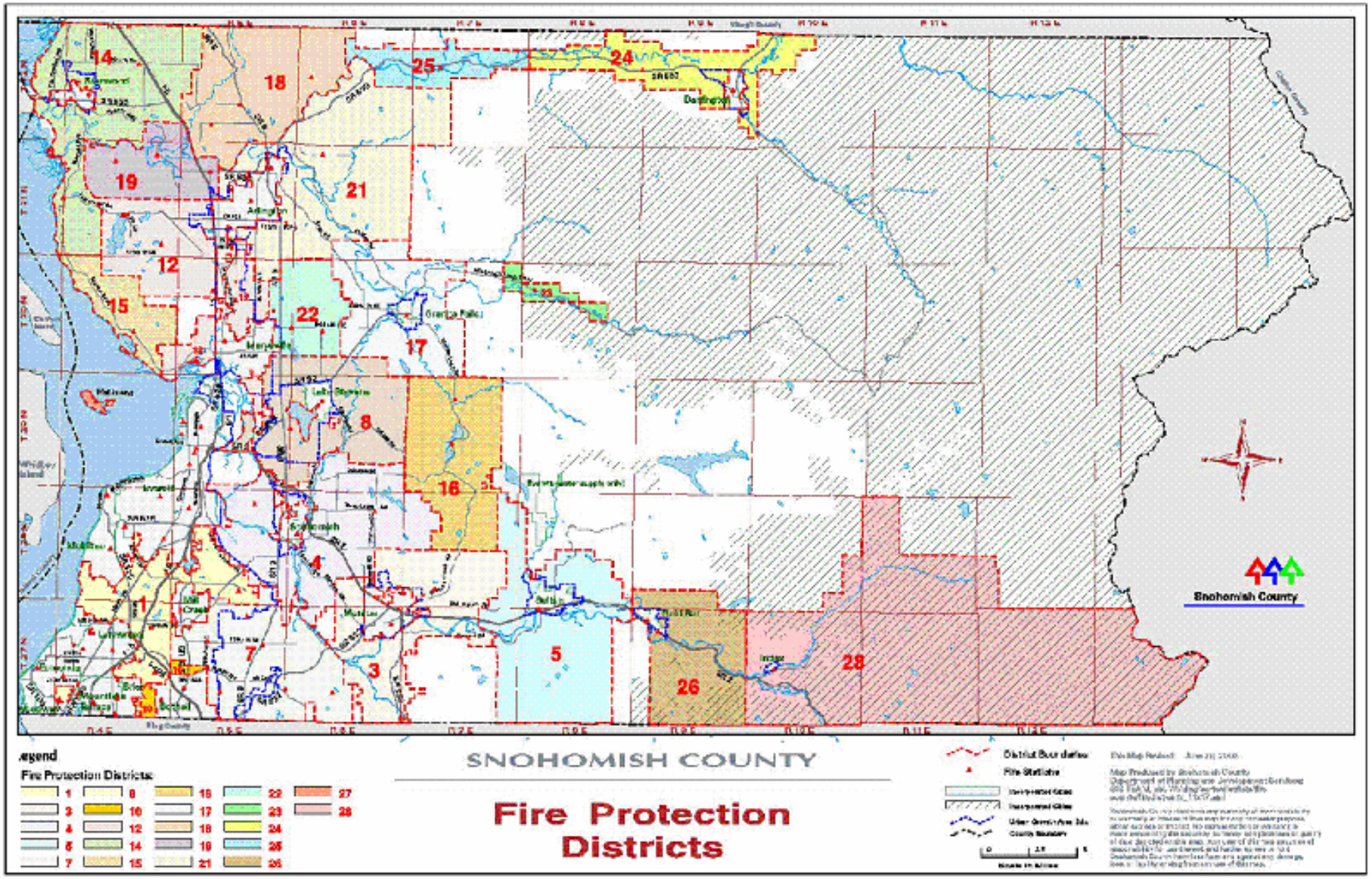
Skagit County Fire Districts



Snohomish County
VERIFIED EMS PROVIDERS

Verified Aid Vehicle - BLS	Verified Ambulance - ALS	Verified Ambulance – BLS
--Snohomish County Airport, Everett --Snohomish County FPD #15, Marysville --Snohomish County FPD #16, Snohomish --Snohomish County FPD #19, Silvana --Snohomish County FPD #21, Arlington --Snohomish County FPD #23. Granite Falls --Stanwood Fire Department, Stanwood --Naval Station Everett Fire Department, Everett	--Snohomish County FPD #1, Everett --Snohomish County FPD #7, Snohomish --Snohomish County FPD #8, Lake Stevens --Arlington City Fire Department, Arlington --Edmonds Fire Department, Edmonds --Everett Fire Department, Everett --Lynnwood Fire Department, Lynnwood --Marysville Fire Department, Marysville --Monroe Fire District 3, Monroe --Stanwood & Community Ambulance, Stanwood	--Snohomish County FPD #4, Snohomish --Snohomish County FPD #5, Sultan --Snohomish County FPD #14, Stanwood --Snohomish County FPD #17, Granite Falls --Snohomish County FPD #18, Arlington --Snohomish County FPD #22. Arlington --Snohomish County FPD #25, Arlington --Snohomish County FPD #26, Gold Bar --Snohomish County FPD #27, Everett --Snohomish County FPD #28, Index --Mt Lake Terrace Fire Department, Mt Lake Terrace --Darrington Ambulance, Darrington --Rural / Metro Ambulance, Mt Lake Terrace --Evergreen Speedway, Monroe --American Medical Response, Tukwila

Population: 610,000 **Major urban centers:** Edmonds, Everett, Lynnwood, Marysville


SNOHOMISH COUNTY
Fire Protection Districts
Snohomish County
Legend
Fire Protection Districts:
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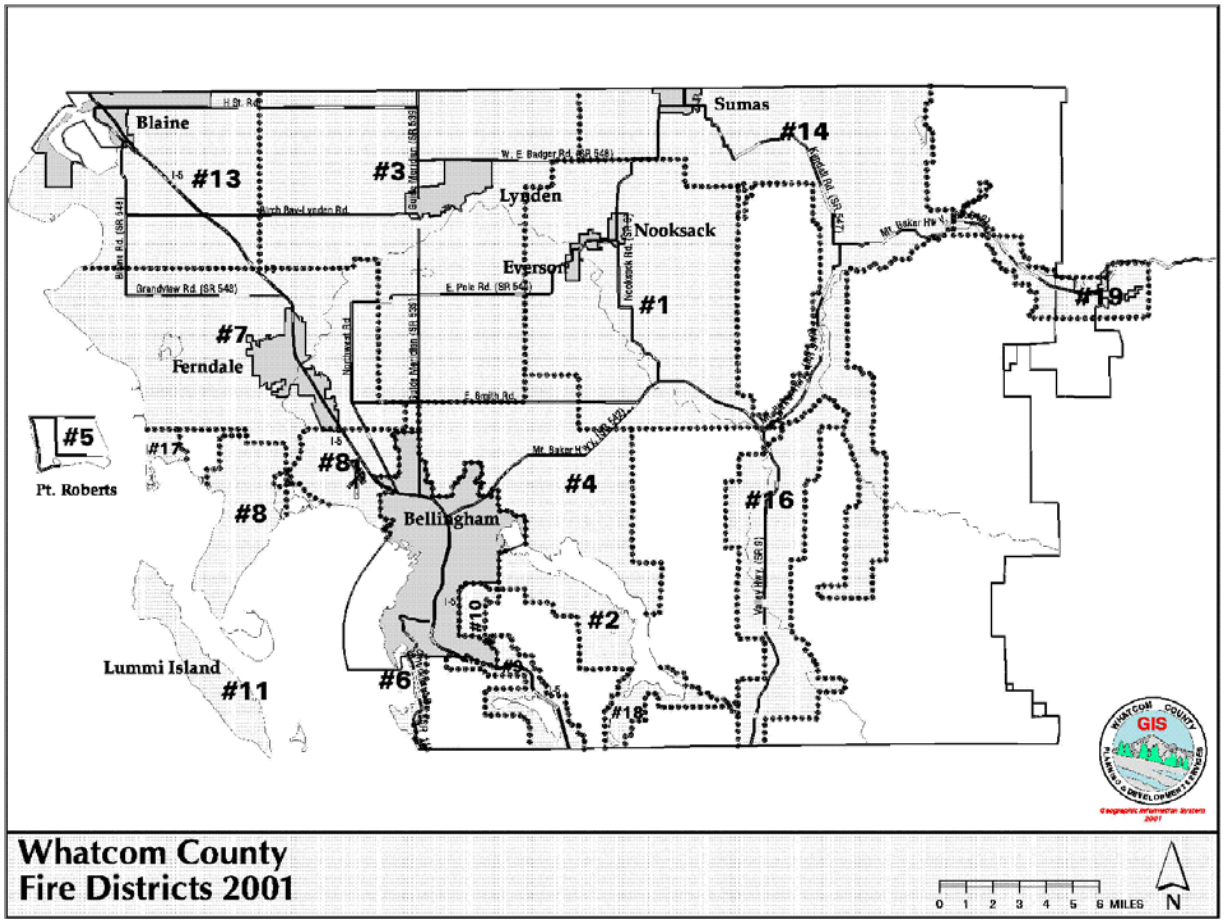
Whatcom County
VERIFIED EMS PROVIDERS

Verified Aid Vehicle - BLS	Verified Ambulance - ALS	Verified Ambulance – BLS Cont'd
--Whatcom County FPD #7, Ferndale --Whatcom County FPD #8, Bellingham --Whatcom County FPD #10, Bellingham --Whatcom County FPD #17, Ferndale --Whatcom County FPD #18, Sedro Woolley	--Whatcom Medic 1, Bellingham Fire Department, Bellingham **Verified Ambulance - BLS** --Whatcom County FPD #1, Everson --Whatcom County FPD #2, Bellingham --Whatcom County FPD #3, Lynden --Whatcom County FPD #4, Bellingham --Whatcom County FPD #5, Point Roberts Whatcom County FPD #6, Bellingham	--Whatcom County FPD #9, Bellingham --Whatcom County FPD #11, Lummi Island --Whatcom County FPD #13, Blaine --Whatcom County FPD #14, Sumas --Whatcom County FPD #19, Glacier --Lynden Fire Department, Lynden --Cascade Ambulance Service Ferndale



Appendix 3: - North Region PCPs & COPs

PATIENT CARE PROCEDURES #1

Access to Prehospital EMS Care

OBJECTIVE

To define elements of the Regional EMS and trauma system necessary to assure rapid universal access to 911 and E-911, rapid identification of emergent situations, rapid dispatch of medical personnel, management of medical pre-arrival needs, rapid identification of incident location.

STANDARD 1

Region-wide access to emergency response shall be by 911 from all private and public telephones. Enhanced 911 is the preferred access capability, where available.

STANDARD 2

Emergency medical dispatch training for all dispatchers is the recommended standard of care. It is recommended that dispatch centers require emergency medical training for all dispatchers. The format shall be approved by the county MPD. A reference system for use by trained dispatchers shall provide dispatch decision criteria consistent with county patient care and level of care standards. Pre-arrival instructions for patient care should be a component.

STANDARD 3

Each county shall participate in a regional program of residence identification to enhance rapid EMS arrival. Establishing standards for addressing and emergency indicators are program elements.

PATIENT CARE PROCEDURE #2

Identification of Major Trauma Patients

OBJECTIVE

To define which patient injuries and severities are classified as major trauma for the purpose of:

- field triage
- hospital resource team activation
- registry inclusion
- regional quality improvement program

STANDARD 1

Major trauma patients will be identified in the initial EMS field assessment using the most current State of Washington Prehospital Trauma Triage Procedures as published by DOH-EMS and Trauma Section.

STANDARD 2

Major trauma patients will be identified by the region's hospitals for the purpose of trauma resource team activation including the trauma surgeon using the Prehospital Index (PHI) score of 4 or greater as a minimum threshold for trauma team activation for adults and children over 14 years old. For children 14 and younger, the Pediatric Trauma Score will be used and a score of 8 or less will be used for activation of the trauma resource team, ore the decision for direct air transport to a designated Level 1 Pediatric Trauma Center.

A trauma resource team activation for adult PHI score of 4 or greater and Pediatric Trauma Score of 8 or less will be described by all North Region hospitals in their designation proposal as the trauma resource team activation threshold.

STANDARD 3

Major trauma patients will be identified by the region's Prehospital services and hospitals for the purposes of state trauma registry inclusion using the trauma registry inclusion criteria as outlined in WAC 246-976-430.

STANDARD 4

Major trauma patients will be identified for the purposes of regional quality improvement as:

- patients who meet the Trauma System Activation criteria of the most current version of the State of Washington Prehospital Triage Procedures Step 1 and 2 and others per Medical Control, and
- patients who activate hospital recourse teams and those who meet the hospital trauma patient registry inclusion criteria.

STATE OF WASHINGTON PREHOSPITAL TRAUMA TRIAGE [DESTINATION] PROCEDURES

- Prehospital triage [is based on the following 3 steps: Steps 1 and 2 require Prehospital EMS personnel to modify medical control and activate the Trauma System. Activation of the Trauma System in Step 3 is determined by medical control**

STEP 1
ASSESS VITAL SIGNS & LEVEL OF CONSCIOUSNESS

- Systolic BP <90*
- HR > 120*
  - for pediatric (< 15y) pts. use BP <90 or capillary refill >2 sec.
  - for pediatric (< 15y) pts. use HR <60 or >120
- Respiratory Rate < 10 > 29 associated with evidence of distress

and/or

YES

1. Take patient to the highest level trauma center within 30 minutes transport time via ground or air transport according to DOH approved regional patient care procedures

**If Prehospital personnel are unable to effectively manage airway, consider rendezvous with ALS, or intermediate stop at nearest facility capable of immediate definitive airway management.

NO

STEP 2
ASSESS ANATOMY OF INJURY

- Penetrating injury of head, neck, torso, groin: OR
- Combination of burns >= 20% or involving face or airway; OR
- Amputation above wrist or ankle; OR
- Spinal cord injury; OR
- Flail chest; OR
- Two or more obvious proximal long bone fractures.

YES

2. Apply "Trauma ID Band" to patient.

NO

STEP 3
ASSESS BIOMECHANICS OF INJURY AND OTHER RISK FACTORS

- Death of same care occupant; OR
- Ejection of patient from enclosed vehicle; OR
- Falls >= 20 feet; OR
- Pedestrian hit at >= 20 mph or thrown 15 feet
- High energy transfer situation
  - Rollover
  - Motorcycle, ATV, bicycle accident
  - Extrication time of > 20 minutes
- Extremes of age < 15 or > 60
- Hostile environment (extremes of heat or cold)
- Medical illness (such as COPD, CHF, renal failure, etc.)
- Second/Third trimester pregnancy
- Gut feeling of medic

YES

CONTACT MEDICAL CONTROL FOR DESTINATION DECISION

YES

1. Take patient to the highest level trauma center within 30 minutes transport time via ground or air transport according to DOH approved regional patient care procedures

2. Apply "Trauma ID Band" to patient.

NO

NO

TRANSPORT PATIENT PER REGIONAL PATIENT CARE PROCEDURES

STATE OF WASHINGTON PREHOSPITAL TRAUMA TRIAGE (DESTINATION) PROCEDURE

Purpose

The purpose of the Triage Procedure is to ensure that major trauma patients are transported to the most appropriate hospital facility. This procedure has been developed by the Prehospital Technical Advisory Committee (TAC), endorsed by the Governor's EMS and Trauma Care Steering Committee, and in accordance with RCW 70.168 and WAC 246-976 adopted by the Department of Health (DOH).

The procedure is described in the schematic with narrative. Its purpose is to provide the Prehospital provider, with quick identification of a major trauma victim. If the patient is a major trauma patient, that patient or patents must be taken to the highest level trauma facility within 30 minutes transport time, by either ground or air. To determine whether an injury is major trauma, the Prehospital provider shall conduct the patient assessment process according to the trauma triage procedure.

Explanation of Process

A. Any certified EMS and Trauma person can identify a major trauma patient and activate the trauma system. This may include requesting more advanced Prehospital services or aero-medical evacuation.

B. The first step (1) is to assess the vital signs and level of consciousness. The words "Altered mental status" mean anyone with an altered neurological exam ranging from completely unconscious, to someone who responds to painful stimuli only, or a verbal response which is confused, or an abnormal motor response.

The "and/or" conditions in Step! mean that any one of the entities listed in Step 1 can activate the trauma system.

Also, the asterisk (*) means that if the airway is in jeopardy and the on-scene person cannot effectively manage the airway, the patient should be taken to the nearest medical facility or consider meeting up with an ALS unit. These factors are true regardless of the assessment of other vital signs and level of consciousness.

C. The second step (2) is to assess the anatomy of injury. The specific injuries noted require activation of the trauma system. Even in the assessment of normal vital signs or normal levels of consciousness, the presence of any of the specific anatomical injuries does require activation of the trauma system.

Please note that steps 1 and 2 also require notifying Medical Control.

D. The third step (3) for the Prehospital provider is to assess the biomechanics of the injury and address other risk factors. The conditions identified are reasons for the provider to contact and consult with Medical Control regarding the need to activate the system. They do not automatically require system activation by the Prehospital provider.

Other risk factors, coupled with the "gut feeling" of savers injury, means that Medical Control should be consulted and consideration given to transporting the patient to the nearest trauma facility.

Please note that certain burn patients (in addition to those listed on Step 2) should be considered for immediate transport or referral to a burn center/unit.

Patient Care Procedures

To the right of the attached schematic you will find the words "according to DOH approved regional patient care procedures." These procedures are developed by the regional EMS and Trauma council in conjunction with local councils. They are intended to further define how the system is to operate. They identify the level of medical care personnel who participated in the system, their roles in the system, and participation of hospital facilities in the system. They also address the issue of inter-hospital transfer, by transfer agreements for identification, and transfer of critical care patients.

In summary, the Prehospital Trauma Triage Procedures and the Regional Patent Care Procedures are intended to work in a "hand in glove" fashion to effectively address EMS and Trauma patient care needs. By functioning in this manner, these two instruments can effectively reduce morbidity and mortality.

PREHOSPITAL INDEX		Circle
Systolic BP	> 100 86 - 100 75 - 85 0 - 74	0 1 2 5
Pulse	> 120 51 - 119 < 50	3 0 5
Respirations	Normal Labored/shallow < 10 min. or Intubated	0 3 5
Consciousness	Normal Confused/combative Incomprehensible words	0 3 5
Penetrating Injury to neck, chest abdomen		4
0 - 3 4 - 24	Minor trauma Major trauma -- trauma code activation	
	PHI:	

If you have any questions on the use of either instrument, you should bring them to the attention of your local or regional EMS and Trauma council or contact 1-800-458-5281.

Pediatric Trauma Score (14 years old or less)

ASSESSMENT	SCORE		
	+ 2	**+ 1**	**- 1**
Size/Weight	Child/Adolescent > 44 lbs (> 22 kg)	Toddler 24 - 44 lbs (11 - 20 kg)	Infant < 24 lbs (< 11 kg)
Airway	Normal	Oral or Nasal Airway	Intubated
Blood Pressure	> 90 mmHg; or good peripheral pulses, perfusion	50 - 90 mmHg; or carotid/femoral pulses palpable	< 50 mmHg; or weak or no pulses
Level of Consciousness	Completely awake	Obtunded or history of loss of consciousness	Comatose/Unresponsive
Open Wound	None	Concussion, abrasion; laceration < 7 cm	Major or penetrating
Fractures	None	Single closed fracture anywhere	Open or multiple fracture
TOTALS:			
TOTAL:			

8 or less - Major Trauma

- Incoming via ground - Activate Trauma Code
- Incoming via MedFlight - transport to Harborview

9 or greater - Minor Trauma

- Treat in Emergency Department

PATIENT CARE PROCEDURE # 3

Trauma System Activation

OBJECTIVE

To define the components of trauma system activation on a regional level.

To clarify that the Prehospital component of trauma system activation includes identification of major trauma patients in the field (using the State of Washington Prehospital Trauma Triage [Destination] Procedure), and early notification and consultation with medical control, trauma center transport and data collection and submission.

To clarify that the hospital component of trauma system activation includes recognition of the critical trauma patients need to ED and surgical intervention and activation of the hospitals trauma resources, and data collection and submission.

STANDARD 1

Dispatch center personnel shall identify major trauma calls using the State of Washington Prehospital Trauma Triage [Destination] Procedure and shall dispatch verified trauma services according to the regional standard for identification of the level of medical care personnel to be dispatched to the scene of major trauma and to transport major trauma and state law. (Patient Care Procedure #4)

STANDARD 2

The response and transport services dispatched to the scene will confirm the patient meets major trauma patient parameters according to the State of Washington Prehospital Trauma Triage [Destination] Procedure.

STANDARD 3

The response and transport service personnel providing care shall place a trauma patient identification number band on all patients who activate the Trauma System according to the State of Washington Prehospital Trauma Triage [Destination] Procedure.

STANDARD 4

The transporting service will provide a patient report to medical control identifying each major trauma patient transported that meets the triage criteria. For STEP 1 patients to a 20 minute ETA notification is required to facilitate trauma surgeon arrival in the ED.

STANDARD 5

Trauma verified transport services shall take identified trauma patients who activate the Trauma System to designated trauma centers in accordance with state requirements and the regional standard *transport of patients to designated trauma centers* (Patient Care Procedure #8). (This standard will not apply until the state trauma center designation process is complete. Until then, Prehospital services will transport major trauma patients to the local facility that can provide the appropriate level of care needed by the patient.)

STANDARD 6

The response and transport services will provide patient data to the Department of Health for all patients identified as meeting the triage criteria (major trauma patients requiring transport to trauma centers) on the State of Washington Prehospital Trauma Triage [Destination] Procedure for trauma registry use. The transport service will provide written documentation of the call 95% of the time prior to leaving the ED.

STANDARD 7

On-line Medical Control at the receiving hospital will utilize the Pre-Hospital Index (PHI) trauma patient scoring system for adults and children over 14 years old to identify the *minimum threshold of activation of a hospital Trauma Team response*. For pediatric major trauma patient 14 years of age or younger, the Pediatric Trauma Score will be utilized. Trauma Team activation includes notification of the Trauma Surgeon.

STANDARD 8

Designated trauma centers will collect and submit data on major trauma patients for trauma registry use in accordance with WAC requirements.

STANDARD 9

Injured patients who **do not meet** Prehospital triage criteria for activation of the trauma system, and all another patients will be transported to local facilities based on county Prehospital patient care protocols and procedures.

PATIENT CARE PROCEDURE # 4

Identification of the Level of Medical Care Personnel to be Dispatched to the Scene of Major Trauma and to Transport Major Trauma

OBJECTIVE

To define the role of BLS and ALS services (agency and its units) in emergency response to reported major trauma incidents.

To define the role of BLS and ALS services in transporting major trauma patients.

STANDARD 1

For initial response to reported major trauma incidents the closest, designated local ALS or BLS trauma verified EMS service shall respond.

STANDARD 2

Where the closest designated local trauma verified service is BLS, a trauma verified ALS service shall respond simultaneously for all reported major trauma patient.

STANDARD 3

For transport of identified major trauma patients in Steps 1 and 2 of the State of Washington Prehospital Trauma Triage [Destination] Procedure, a designated local trauma verified ALS service shall provide transport.

STANDARD 4

For transport of identified major trauma patients in the "consult medical control portion of the State of Washington Prehospital Trauma Triage [Destination] Procedure", ALS or BLS transport shall be at the discretion of Medical Control from the receiving trauma center. In either case, the transport service shall be trauma verified, including air transport service.

STANDARD 5

For multi-casualty, major trauma incidents which exhaust resources of the local EMS system, mutual aid from BLS and ALS verified trauma services shall be activated using the county and inter-county procedures. Trauma verified ALS services shall transport the Step 1 and Step 2 patients as identified through the State of Washington Trauma Triage [Destination] Procedure tool when possible. Transport designated trauma facilities will be under the direction of Medical Control or Incident Command structure depend on the magnitude of the event.

PATIENT CARE PROCEDURE # 5 -

Prehospital Response Times

OBJECTIVE

To define Prehospital response times for major trauma to urban, suburban, and rural and wilderness areas in the North Region.

To define urban, suburban, rural and wilderness response areas.

STANDARD 1

Response: When responding for major trauma to an urban area, initial response units will arrive at the scene within 5 minutes of 80% of the time.

Transport: When responding for major trauma to an urban area, ALS transport units will arrive within 8 minutes of 80% of the time.

STANDARD 2

Response: When responding for major trauma to a suburban are, initial response units will arrive the scene within 5 minutes 80% of the time.

Transport: When responding for major trauma to a suburban area, ALS transport units will arrive within 10 minutes 80% of the time.

STANDARD 3

Response: When responding for major trauma to a rural area, initial response units will arrive at the scene within 12 minutes 80% of the time.

Transport: When responding for major trauma to a rural area, ALS transport units will arrive within 20 minutes 80% of the time.

STANDARD 4

Response: When responding for major trauma to a wilderness area, initial response units will arrive at the scene within 40 minutes 80% of the time.

Transport: When responding for major trauma to a wilderness area, ALS transport units will arrive within 80% of the time.

STANDARD 5

When the initial response unit is also the transport unit and there is no other initial Prehospital tiered response system in place, initial response time standards will apply to the dual purpose unit as follows:

- to urban areas 5 minutes 80% of the time
- to suburban areas 5 minutes 80% of the time
- to rural areas 12 minutes 89% of the time
- to wilderness areas 40 minutes 80% of the time

Urban Area: An incorporated area over 30,000; or
An incorporated or unincorporated area of at least 10,000 people and a population density over 2,000 people per square mile.

Suburban Area: An incorporated or unincorporated area with a population of 10,000 to 29,999 or any area with a population density of 1,000 to 2,000 people per square mile

Rural Area: An incorporated or unincorporated area with total population less than 10,000 people, or with population density of less than 1,000 people per square mile.

Wilderness Area: Any rural area not readily accessible by public or private maintained road.

PATIENT CARE PROCEDURE # 6

Activation of Air Ambulance services for Field Response to Major Trauma

OBJECTIVE

To define how helicopter activation for major field response is accomplished in the Region.

STANDARD 1

The decision to activate air ambulance service for field response to major trauma in urban and rural areas shall be made by the highest trained responder, who can be a First Responder, EMT or Paramedic, from the scene ***with*** on-line medical control consultation when needed. Where ICS is used, the commander shall be an integral part of this process.

STANDARD 2

The decision to activate air ambulance services for field response to major trauma in wilderness areas shall be made by anyone familiar with EMS in the area.

STANDARD 3

Aero-medical programs requested to respond will follow their internal policies for accepting a field mission.

PATIENT CARE PROCEDURE # 7

Transport of Patients Outside of Base Area

OBJECTIVE

To define responsibility for patient care for major trauma transports outside base coverage areas, counties and EMS Regions.

To define the procedure for transfer of responsibility during transports outside base areas, counties and EMS Regions.

STANDARD 1

Patients transferred out of any local base coverage area (from either the base hospital or the field) are initially the responsibility of local on-line medical control. Local Prehospital protocols will be followed by Prehospital personnel. Initial orders, which are consistent with local Prehospital protocols, will be obtained from base station on-line medical control.

STANDARD 2

When transport service crosses into *destination* jurisdiction, the destination on-line medical control will be contacted and given the following information:

- brief history
- pertinent physical findings
- summary of treatment (per protocols and per orders from base medical control)
- response to therapy
- current condition

STANDARD 3

The destination medication control physician may add further orders if they are within the capabilities of the transport personnel and consistent with the provider's local medical protocols.

STANDARD 4

The nearest trauma center base station will be contacted during transport should the patient's condition deteriorate and/or assistance is needed. The transporting unit (ground or air) may divert to the closest trauma center as dictated by the patient's condition.

STANDARD 5

Pre-hospital providers will follow local county protocols.

PATIENT CARE PROCEDURE # 8

Transport of Patients to Designated Trauma Centers

OBJECTIVES

To define the flow of major trauma patients from the incident scene to hospitals in the region and inter-regionally.

STANDARD 1

Prehospital service personnel will identify injured patients as "major trauma patients" using the state of Washington Prehospital Trauma Triage [Destination] Procedure identification tool.

STANDARD 2

Prehospital trauma patients identified as meeting "trauma System Activation" criteria (major trauma patient in Step 1 and Step 2 and anyone in Step 3 [State of Washington Prehospital Trauma Triage [Destination] Procedure Tool] by order of medical control) shall be transported to the highest level designated trauma center hospital within 30 minutes. (The 30 minutes is calculated from the time of the departure of the transport vehicle from the scene and the ETA at the designated trauma center.)

STANDARD 3

For Prehospital trauma patients identified as meeting the criteria for Consulting Medical Control, the on-line medical control physician will determine if the patient activates the trauma system. If it is determined that the trauma patient does activate the trauma system, the patient shall be taken to the highest level designated trauma center within 30 minutes. If the on-line medical control physician (the only Emergency Department physician) determines the trauma patient does not activate the trauma system the medical control physician will determine the destination of the patient, which may include non-designated hospitals. It shall be on the on-line medical control physician's responsibility to communicate the patient's trauma system activation status and the destination decision to the transporting service.

STANDARD 4

Major trauma patients with special needs, as in head injury, burns, intra-thoracic injury, and pediatric trauma will be considered for direct transport, by ground or air, to the highest level designated inter-regional trauma center with capabilities to manage the patient. Medical control will determine the patient destination. This standard recognizes longer transport times.

PATIENT CARE PROCEDURES #9

Designated Trauma Center Diversion

OBJECTIVE

To define implications for initiation of trauma center diversion (bypass) status in the Region.

To define methods for notification of initiation of trauma center diversion.

STANDARD 1

Designated trauma centers in the Region will go on diversion for receiving major trauma patients based on the facilities' inability to provide initial resuscitation, diagnostic procedures and operative intervention at the designated level of care.

STANDARD 2

Diversion will be categorized as *partial* or *total* based on the inability of the facility to manage specific types of major trauma or all traumas at the time.

Hospitals must consider diversion when:

- Surgeon is unavailable
- OR is unavailable
- CT is down if Level II
- Neurosurgeon is unavailable if Level II
- ER unable to manage more major trauma

STANDARD 3

Each designated trauma center will have a hospital approved policy to divert patient to other designated facilities based on its ability to manage each patient at a particular time. A diversion log will be kept indicating the time of diversion and the reason for partial or total diversion.

STANDARD 4

All facilities imitating diversion must provide notification to other regional trauma centers.

PATIENT CARE PROCEDURES #10

Activation of Hospital Trauma Resuscitation Team

OBJECTIVE

To define region-wide minimum activation criteria for hospital trauma resuscitation teams.

STANDARD 1

The Prehospital Index (PHI) (trauma patient severity scoring tool) will be utilized for trauma patients over 14 years of age. Patients with a PHI score of 4 or greater than 4 will automatically trigger the activation of the hospital trauma resuscitation team including response by the surgeon on trauma call.* The PHI will be calculated by the medical control physician from the Prehospital medic radio report and shall be based on the patient's initial condition (prior to Prehospital treatment). When possible, the Prehospital report will be called to the Emergency Department 20 minutes prior to the estimated time of arrival, to allow for notification and response of the surgeon on call for trauma.

Trauma patients over 14 years of age, who arrive at the ED by private car or EMS transport ad have a Prehospital Index score of 4 or greater on arrival will automatically trigger a hospital trauma resuscitation team activation including surgeon response.

STANDARD 2

The Pediatric Trauma Score (trauma patient severity scoring tool) will be utilized for pediatric trauma patients (0 to 14 years of age). Pediatric trauma patients with a Pediatric Trauma Score of 8 or less will automatically trigger the activation of the hospital trauma resuscitation team including response by the surgeon on trauma call. The Pediatric Trauma Score will be calculated by the on-line medical control physician from the Prehospital radio report and be based on the patient's initial condition (prior to Prehospital treatment). When possible, the Prehospital report will be called to the Emergency Department 20 minutes prior to the estimated time of arrival, to allow for notification response of the surgeon on call for trauma.

Pediatric trauma patients who arrive at the ED by private car or EMS transport and have a Pediatric Trauma Score of 8 or less will automatically trigger a hospital trauma resuscitation team activation including surgeon response.

STANDARD 3

A hospital may set a higher standard for activation of its hospital trauma resuscitation team.

PATIENT CARE PROCEDURES #11

Inter-Facility Transfer Of Major Trauma Patients

OBJECTIVE

To define the referral resources for inter-facility transfers of major trauma patients requiring a higher level of care or transfer due to situational adult and pediatric inability to provide care.

To recommend criteria for inter-facility transfer of adult and pediatric major trauma patients from receiving facility to a higher level of care.

STANDARD 1

All inter-facility transfers will be consistent with OBRA/COBRA regulations as defined by WAC.

STANDARD 2

Written transfer agreements will be in place among all facilities in the region and tertiary care facilities commonly referred to which are out of the region. A standard regional transfer agreement shall be utilized.

STANDARD 3

Level III, IV and V facilities are recommended to consider transferring the following adult and pediatric patients to Level I or II facilities for post resuscitation care:

Central Nervous System Injury D_3

- Head injury with any one of the following:
  - open, penetrating, or depressed skull fracture
  - CSF leak
  - severe coma (Glasgow Coma Score < 10)
  - deterioration on Coma Score of 2 or more points
  - lateralizing signs
- Unstable spine
- Spinal cord injury (any level)

Chest Injury D_x

- Suspected great vessel or cardiac injuries
- Major chest wall injury
- Patients who may require protracted ventilation

Pelvis Injury D_x

- Pelvic ring disruption with shock requiring more than 5 units of blood transfusion
- Evidence of continued hemorrhage

- Compound/open pelvic fracture or pelvic visceral injury

Multiple System Injury D_x

- Severe facial injury with head injury
- Chest injury with head injury
- Abdominal or pelvic injury with head injury
- Burns with head injury

Specialized Problems

- Burns > 20% BSA or involving airway
- Carbon monoxide poisoning
- Barotrauma

Secondary Deterioration (Late Sequelae)

- Patient requiring mechanical ventilation
- Sepsis
- Organ system(s) failure (deterioration in CNS, Cardiac, Pulmonary, Hepatic, Renal, or Coagulation systems)
- Osteomyelitis

STANDARD 4

All pediatric patients < 15 years who are triaged under Step 1 or Step 2 of the Prehospital triage tool or are unstable after ED resuscitation or emergent operative intervention at hospitals with general designations should be considered for immediate transfer to a Level I designated pediatric trauma center hospital.

STANDARD 5

For inter-facility transfer of critical major trauma patients, air or ground ALS transport is the standard. Transport of patients out of base area, standards (Patient Care Procedure #7) shall be followed. Trauma verified services shall be used for inter-facility transfers.

Appendix 4: - North Region Native American Tribes

Tribes of Washington State

North Region Native American Tribes / Councils:

1. Samish Indian Nation/Anacortes, Skagit County
2. Upper Skagit Tribe/Sedro Woolley, Skagit County
3. Swinomish Tribe/La Conner, Skagit County
4. Sauk-Suiattle Tribe/Darrington, Snohomish County
5. Tulalip Tribe/Marysville, Snohomish County
6. Stillaguamish Tribe/Arlington, Snohomish County
7. Lummi Indian Nation/Bellingham, Whatcom County
8. Nooksack Tribe/Deming, Whatcom County